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- Any future actions taken or not taken by the United States government related to Medicaid or the Affordable Care Act;
- The amount and timing of receipt of any distributions from the Federal Emergency Management Agency and private insurance companies to repair damage caused by Humicanes María and Irma;
- The amount and timing of receipt of any amounts allocated to Puerto Rico and provided under the Community Disaster Loans Program;
- The amount and timing of any additional amounts appropriated by the United States government to address the impacts of the COVID-19 pandemic;
- The amount and timing of receipt of any additional amounts appropriated by the United States government to address the funding gap described herein;
- The timeline for completion of the work being done by the Puerto Rico Electric Power Authority ("PREPA") to repair PREPA's
 electric system and infrastructure and the impact of any future developments or issues related to PREPA's electric system
 and infrastructure on Puerto Rico's economic growth;
- The impact of the COVID-19 pandemic on the financial, social, economic, and demographic condition of Puerto Rico;
- The impact of the measures described herein on outmigration; and
- The impact of the resolution of any pending litigation in the Title III cases

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List of Acronyms and Key Terms

AAFAF Puerto Rico Fiscal Agency and Financial Advisory Authority (Spanish acronym)

ADEA Agricultural Enterprise Development Administration (Spanish acronym)

ADSEF Family Socio-Economic Development Administration (Spanish acronym)

AFSCME Armerican Federation of State, County and Municipal Employees

AMPR Asociación de Maestros de Puerto Rico

April 2018 Fiscal

Fiscal Plan certified April 2018, immediately following Hurricanes Maria and Irma which first set out the major reforms

ASEM Puerto Rico Medical Services Administration (Spanish acronym)
ASES Puerto Rico Health Insurance Administration (Spanish acronym)

CAFR Comprehensive Annual Financial Report
CAGR Compound Annual Growth Rate
CBO Congressional Budget Office
CDBG Community Development Block Grant
CHIP Children's Health Insurance Program (CHIP)
COFIM La Corporación de Financiamiento Municipal

COFINA Puerto Rico Sales Tax Financing Corporation (Spanish acronym)

COSSEC Public Corporation for the Supervision and Deposit Insurance of Puerto Rico Cooperatives (Spanish acronym)

COR3 Central Office for Recovery, Reconstruction, and Resiliency

DCR Department of Corrections and Rehabilitation

DB Defined Benefit pension plan
DC Defined Contribution pension plan

DDEC Puerto Rico Department of Economic Development Commerce (Spanish acronym)

DOH Department of Health DOJ Department of Justice DPS Department of Public Safety DSA Debt Sustainability Analysis EITC Earned Income Tax Credit ERS Employee Retirement System FAM Municipal Administration Fund Foreign Direct Investment FDL Federal Government The US Federal Government

FEMA Federal Emergency Management Agency
FMAP Federal Medical Assistance Percentage (FMAP)

FOMB Financial Oversight and Management Board for Puerto Rico

FQHC Federally Qualified Health Center

FYTD Fiscal-Year-To-Date

GAO US Government Accountability Office

GDB Government Development Bank for Puerto Rico

GDP Gross Domestic Product

GF General Fund

GFEWG Governor's Fiscal and Economic Working Group
GNP Gross National Product

Government Government of Puerto Rico
Governor Governor Wanda Vázquez Garced
Hacienda Puerto Rico Department of Treasury
HHS US Department of Health and Human Services
HUD US Department of Housing and Urban Development

Hurricanes Hurricane Irma and Hurricane Maria
IFCU Independently Forecasted Component Units

IMF International Monetary Fund

IPR Invest Puerto Rico
Island Puerto Rico

KPIs Key Performance Indicators
LEA Local Education Agency

March 2017 Fiscal Plan certified by the Financial Oversight and Management Board in March 2017, before Hurricanes Maria and Irma hit

Plan the Island

MADS Maximum Annual Debt Service
MCOs Managed Care Organizations
MFCU Medicaid Fraud Control Units

Mi Salud Medicaid program in Puerto Rico (now called VITAL)

MMIS Medicaid Management Information System

NAP Nutrition Assistance Program (Spanish: Programa de Asistencia Nutricional, PAN)
NRW Non-Resident Withholdings

NRW Non-Resident Withholdings

OCFO Office of the CFO

October 2018 Fiscal Fiscal Plan certified by the Financial Oversight and Management Board in October 2018, updated for 2018 revenue and

Plan expenditure actuals

OMB Office of Management and Budgel
P3 Public Private Partnerships
P3 Authority Public Private Partnership Authority

PA Public Assistance

Parties AAFAF and the Government

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Defined benefit actuarial responsibility program by which agencies and instrumentalities are responsible for paying their PayGo

pensions obligations on an annual basis via a "PayGo Charge"

PBA Public Buildings Authority

Platino Medicare Advantage program that also provides Medicaid wraparound services equivalent to Mi Salud / VITAL program

PMO Program Management Office PMPM Per Member Per Month

PRASA Puerto Rico Aqueduct and Sewer Authority PRCCDA Puerto Rico Convention Center District Authority

PRDE Puerto Rico Department of Education PREB Puerto Rico Energy Bureau

PREMA Puerto Rico Emergency Management Agency PREPA Puerto Rico Electric and Power Authority

PRHFA (or HFA) Puerto Rico Housing Finance Authority PRHTA (or HTA) Puerto Rico Highway and Transportation Authority PRIDCO Puerto Rico Industrial Development Company PRITS Puerto Rico Information Technology Service

PROMESA Puerto Rico Oversight, Management and Economic Stability Act

PRPB Puerto Rico Police Bureau PRTC Puerto Rico Tourism Corporation PSC Puerto Rico Public Service Commission

REQP Request for Proposal SCO State Coordinating Officer SRF Special Revenue Fund SR Structural Reform SUT Sales and Use Tax

SIFC State Insurance Fund Corporation TANE Temporary Assistance for Needy Families UPR University of Puerto Rico

WIOA Workforce Innovation and Opportunity Act

2019 Fiscal Plan Fiscal Plan certified by the Financial Oversight and Management Board in May 2019

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Executive Summary

The people of Puerto Rico need and deserve plentiful good jobs, a dynamic and prosperous economy, affordable and reliable electricity, and an efficient and responsive public sector—but have not had any of these things for more than a decade. Instead, since 2005, the number of people living under the poverty line has increased, the economy has shrunk, electricity has remained expensive and unreliable, labor market regulations have remained burdensome, the business environment has remained poor, and the public sector has provided declining levels of service at a high cost to residents.

On top of these longstanding economic challenges, multiple large-scale natural disasters have struck Puerto Rico in the last three years, testing the resiliency of economic and social institutions like never before.

In the fall of 2017, Hurricanes Maria and Irma inflicted unprecedented damage on the physical infrastructure of Puerto Rico, leaving large segments of the population without power for weeks and in many cases months. Thousands died, many of them due not to the direct effects of the storm but rather its aftereffects. There was widespread economic dislocation in the aftermath as the scale of the damage became evident. Impact to the housing stock, power and water infrastructure, and inland transportation infrastructure, created extremely challenging conditions for residents, while the small business sector was badly damaged as inventories were destroyed and the economy suffered an abrupt negative shock.

After a very difficult period in the immediate aftermath of the storms, the economy gradually recovered, and efforts turned to rebuilding. Aided by a large-scale federal response, the hard work assessing the damage to critical infrastructure occurred through the fall of 2017 and into 2018.

In the summer of 2019, the residents of Puerto Rico reacted with outrage to publicly released comments by the governor and other senior officials. The actions resulted in a crisis of confidence in government institutions, and large-scale public protests. The Oversight Board watched the protests with admiration for the fortitude of the people of Puerto Rico and with sadness for the crisis that made the protests necessary. For far too long government in Puerto Rico has failed to treat the Island's residents with the respect that they deserve. Governor Rosselló and other senior officials ultimately resigned, resulting in Governor Vázquez taking office. Just as the Island was recovering from political disruption and embarking on reconstruction at the end of 2019, Puerto Rico suffered the most serious earthquakes in recent memory, resulting in structural damage to buildings across southwestern Puerto Rico. Residents of these communities were subjected to hundreds of aftershocks over several months, some approaching the strength of the first earthquakes. Communities faced concerns over public safety as infrastructure was affected, businesses suffered further disruption, and the Government saw damage to schools, prisons and other crucial infrastructure. The full extent of the damage is still unknown, and rebuilding efforts in some places have not yet begun.

Finally, only two months later, Puerto Rico — along with the rest of the world — was confronted with the COVID-19 global pandemic. Overnight, the economy shut down except for the most critical activities as the Government took prudent steps to mitigate the risk of a catastrophic public health crisis. Unemployment has skyrocketed as many businesses have been forced to shut down, and the local and federal governments have quickly mobilized to provide support. Many projections indicate that the economic shock due to COVID-19 will be worse than that of the Great Recession. The pathway to economic recovery remains highly dependent on the overall public health response and the federal government's ability to provide economic support for those whose livelihoods are at risk.

For nearly four years, the Financial Oversight and Management Board for Puerto Rico ("FOMB" or the "Oversight Board") has worked to fulfill the mandate of PROMESA: to ensure fiscal sustainability and restore access to capital markets. In the first instance, due to the unending series of unpredictable disasters, the effort has focused on utilizing certified Fiscal Plans and Budgets to ensure Puerto Rico is able to respond to these crises while also moving toward medium and long term fiscal and economic sustainability.

Fiscal Plans have pressed for major structural reforms to restore competitiveness, enable growth, and spur a return to prosperity. These include human capital, welfare, and education reforms to advance successful participation in the formal labor market, reforms to streamline core business processes (e.g., paying taxes, registering property and obtaining permits) to improve the ease of doing business and enable job creation, and proposals to enable reliable power and stable infrastructure for businesses and households. In addition to these structural reforms, the Fiscal Plans have focused on improving the responsiveness and efficiency of the Government, while reducing unnecessary administrative expenses and mitigating the escalating growth of healthcare and pension costs, which could otherwise cripple future governments.

The Fiscal Plans have accompanied these reforms with targeted investments in and support for those on the front lines of service delivery. Over the years, the Fiscal Plans have provided for salary raises for teachers, principals, firefighters, and police officers to ensure salaries for these critical frontline roles are more competitive. Strategic capital investments have been made in hospitals, correctional institutions, public safety equipment, and other infrastructure. Moreover, the Fiscal Plans have included increased spending in areas that are important for the people of Puerto Rico: funds for an Earned Income Tax Credit to encourage more formal labor market participation, needs-based scholarships for UPR to ensure every student on the Island can access higher education, funds for the Puerto Rico Clean Water and Drinking Water State Revolving Fund, and an emergency reserve to enable immediate Government action in times of crisis, among others.

At the onset of the COVID-19 crisis, the Oversight Board mobilized in close partnership with the Government to deliver immediate support and relief. This included providing a \$787 million package of measures to support front-line workers and small businesses. The Government also took executive actions that the Oversight Board supported to provide temporary relief on tax payment deadlines. Finally, the Oversight Board approved actions to provide a \$400 million advance on federal funding for economic impact payments administered by Hacienda, as well as a liquidity facility of up to \$185 million for municipalities suffering from revenue collection deferrals.

Since certifying the first Fiscal Plan in 2017, and notwithstanding the emergencies, the Oversight Board has been able to drive meaningful progress in creating a leaner, more affordable government. This has resulted in the ability of the Government to increase expenditures at a time of crisis, while ensuring total expenditure levels remain within total available revenues, rather than be forced to cut budgets that have not been carefully managed, as other states have been forced to do as COVID-19 has caused revenues to drop. There is a new level of transparency and control over Government spend, including the elimination of multi-year appropriations that permitted overspending; controls over the reapportionment of funding between concepts of spend to eliminate the defunding of accrued liabilities; and regular reporting on revenues and expenses. Moreover, the 2020 and 2021 budgets were built at a granular "concept code" level (e.g., differentiating between spend on professional IT services versus advisory services). The Oversight Board has been able to reject contracts that could have led to overspending, such as the proposal to externalize Puerto Rican prisons, and the Government has been held accountable to its implementation requirements via public hearings, such as those held on education, public safety, corrections, and economic development.

Unfortunately, despite this real progress in the face of ongoing crises, the Government has still failed to achieve meaningful economic growth through structural reforms or drive operational change that would deliver greater responsiveness and efficiency of government services. Efforts at private sector labor market reforms have stalled and the impact of human capital and welfare reform is not expected for several years. The Government's efforts to improve the ease of doing business have not changed the burden on businesses in any meaningful way. Rather than achieving budget savings by improving the way services are delivered or discontinuing duplicative or unimportant services, the Government has enacted broad-based early retirement programs to reduce headcount, creating major gaps in capabilities and functionality and potentially putting services at risk.

Across many areas, the Government has struggled to implement changes, with even new investments often not driving the intended use. For example, salary raises provided for teachers were improperly implemented, bringing new litigation costs, while police officers' enrollment in Social Security was delayed by six months. Despite efforts by members of the Government, the Oversight Board, and the Federal Government – which has increased oversight over the use of federal funds, installed federal monitors in certain agencies, and managed expectations via consent decrees – the Government has been unable to meet the increasingly urgent need for real change.

The 2020 Fiscal Plan financial forecasts suggest that the current financial trajectory is not sustainable in the long-term. Perhaps more importantly, the 2020 Fiscal Plan — even if implemented in full — will not raise Puerto Rico and its residents to a level of prosperity comparable to even the poorest states on the US mainland. There continues to be insufficient political appetite to drive the types of structural reforms that are needed to create sustainable economic growth and an inability to implement even reforms that have nominally been agreed-upon.

As the US and Puerto Rico begin to recover from the current economic and health crisis, and while there is national fiscal and monetary policy support, the Government must act with an exceptional level of determination. With so many residents suffering from the economic consequences of successive natural disasters, the need for change is even more urgent.

The 2020 Fiscal Plan includes dozens of practical actions that the Government must take to create a more accountable, affordable, and transparent government, with resources focused on improving the front-line services that matter. Given the global COVID-19 pandemic, the 2020 Fiscal Plan pauses most government right-sizing measures for a year, so that the full focus of Government may focus on recovery and implementation. To drive efficient and successful implementation of key reforms and outcomes, the 2020 Fiscal Plan also introduces milestone budgeting, which will provide for investments in certain areas once key milestones are achieved. Crucial milestones include: final establishment of the Defined Contribution accounts for public retirees and employees; the publication of the 2017 Comprehensive Audited Financial Report (and progress towards publication of subsequent year reports); implementation of time and attendance reporting; and meaningful consolidation of backoffices to create efficiencies, among others.

The 2020 Fiscal Plan also lays out discrete actions that must be taken to make structural reforms to the economy, improving labor force participation, the ease of doing business, and energy and infrastructure management. Finally, the 2020 Fiscal Plan includes strategic one-time investments to speed up Puerto Rico's recovery in light of the natural disasters and COVID-19 by allocating funds to strengthen the Island's public healthcare system, human capital, and telecommunications infrastructure.

Absent real reform, Puerto Rico may not ever fully recover from all its recent crises. The 2020 Fiscal Plan lays out the meaningful changes needed to lead to an effective, responsive government and growing economy.

8 8 8

Prior to the enactment of PROMESA, Puerto Rico had been mired in an economic and demographic downward spiral for a decade. As of 2018, the economy was \$18 billion smaller in real terms and the population was more than half a million smaller (largely due to outmigration) than it was in 2005 – trends that, even before recent natural disasters, were projected to continue. Over 40% of the population (including ~58% of Puerto Rican children) lives below the poverty line, and ~47% are dependent on Medicaid for healthcare.

Meanwhile, before PROMESA, the consolidated Commonwealth's outstanding debt and pension liabilities had grown to over \$120 billion — with more than \$70 billion in financial debt and more than \$50 billion in pension liabilities — an amount almost twice the size of Puerto Rico's economy.

These core challenges were not new and temporary; they had been long-standing and structural. For decades, the private sector had been overly reliant on now-expired federal tax advantages while having to operate in a difficult business climate with poor infrastructure, cumbersome laws and regulations, and expensive and unreliable electricity and transit systems.

Other challenges included a large public sector that had struggled to deliver improved outcomes in critical areas such as ease of doing business and education, as well as a labor force participation rate that was (and continues to be) among the lowest in the world. In the World Bank's Worldwide Governance Indicators, Puerto Rico ranks far below the mainland United States in "voice and accountability" for residents, government quality, regulatory quality, rule of law, and control of corruption.² In the OECD's 2015 Program for International Student Assessment (PISA), only six countries or regions in the world scored lower than Puerto Rico in science and reading, and only three scored lower than Puerto Rico in math.³ Likewise, of the 233 countries or regions for which the World Bank measures labor force participation rates, Puerto Rico is currently ranked 232. In the three decades that the World Bank has gathered such data, Puerto Rico has never ranked higher than 212. These are structural problems that demand structural solutions, but to date, the Oversight Board has seen neither the willingness nor the ability, on the part of the Government, to enact structural reforms sufficient to address these problems that hold back the standard of living of Puerto Rico's residents.

Finally, Puerto Rico had fiscal management challenges for years, creating a growing deficit (*Exhibit 1*). This deficit was difficult to forecast with certainty because of the protracted delays in issuing annual audited financial statements, lack of proper fiscal controls, lack of centralized financial records, and inefficient financial management. Puerto Rico had also been in an economic structural decline for over a decade, which led to an eroding tax base. To finance these primary deficits, Puerto Rico had resorted to issuing debt which became unsustainable. As the Oversight Board began its work in late 2016, the Commonwealth was projected to run structural annual deficits exceeding \$7 billion, or \$3 billion before debt service.

¹ The World Bank Group, World Development Indicators

² The World Bank Group, Worldwide Governance Indicators

³ U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics Program for International Student Assessment (PISA) 2015, State Results: Puerto Rico.

EXHIBIT 1: PROJECTED PRE-FISCAL PLAN DEFICIT (BEFORE THE HURRICANES)



In light of the debt crisis and unsustainable path of the Government's finances, when the Oversight Board was appointed in 2016, it set out to find long-term solutions, certifying Fiscal Plans that have established the following priorities:

- Creating a leaner, more affordable government. The Oversight Board has outlined necessary operational changes to streamline the Government and enable the reduction of unnecessary administrative expenses. Such reforms include improving management of the public education system, pursuing civilianization to enable more sworn police officers to move into the field, consolidating agencies to enable coordination and back-office efficiencies, reducing the correctional system footprint to enhance staffing practices, privatizing WIPR, incorporating best practices in digitization, and improving Elections Commission operations. As such, the Oversight Board has identified how to remove barriers to efficient and effective government service delivery.
- Identifying specific actions needed to reform the structure of the economy and create the conditions for growth in Puerto Rico. The Oversight Board has provided a comprehensive plan for as well as targeted investments to drive economic growth by improving participation in the formal labor market; spurring job creation; transforming the education system; improving access to reliable infrastructure and energy; and supporting the people of Puerto Rico through workforce development programs.
- Increasing transparency of and controls over Government finances. By instituting budgets designed at the cost concept level, regular reporting on cash and actual expenditures, formal processes for reapportionments and allocation of capital expenditures, and reviews of major contracts to ensure fiscal plan compliance, the Oversight Board has given stakeholders a common fact base around the Government's fiscal situation and reduced superfluous and non-transparent spending.
- Directing resources to front line service delivery. The Oversight Board has enhanced the impact of Government spending through priority investments in areas of

demonstrated need such as public safety, health care, and education, and to enable response to natural disasters.

Maximizing the impact of federal investments in Puerto Rico. The Oversight Board has placed particular emphasis on aligning federal funds towards investments that will accelerate progress as much as possible against the key reform areas, such as infrastructure, COVID-19 response, health system improvements, educational outcomes, and economic growth.

While Fiscal Plans have been able to outline potential major improvements, progress within the Government has been slow overall. Government agencies have reduced expenditures, but typically not in the fashion that the Oversight Board required in its Fiscal Plans. Instead of rethinking business processes and ways of working, agencies have almost exclusively relied on attrition and early retirement programs broadly applied to reduce expenses in ways that may cause longer-term risks to the Government's ability to deliver services. Progress has also been limited across other key reforms. Some examples include:

- Actions to consolidate government agencies and to allocate resources away from back office to front line activities have been severely slowed or abandoned altogether.
- There continue to be issues with financial transparency and accountability given delays in system integration (e.g., ERP and accounting systems are still disconnected), issuance of consolidated audited financial statements, and establishment of a robust OCFO function to ensure a coordinated Government fiscal management effort across budgeting, implementation, personnel, and procurement.
- Efforts to improve ease of doing business in Puerto Rico have not resulted in meaningful change, and Puerto Rico's Ease of Doing Business rankings continue to decline as other jurisdictions have improved, contributing to low levels of new investment.
- Labor force participation has not increased given the Government's refusal to pursue comprehensive private sector labor market reform, coupled with a major delay in institution of the NAP work/volunteer requirement and limited public communication efforts to raise awareness of the new Earned Income Tax benefit.
- While the Government has completed the transition to a single region managed care model for Medicaid, it has stalled in pursuing value-based health system reforms and Medicaid fraud, waste, and abuse reform initiatives.
- Investments that Fiscal Plans have funded for the addition of staff or improvements in compensation (e.g., police civilian admin staff, Forensics technicians/specialists, police insurance and Social Security) have not been spent as intended and are often delayed, diluting their intended effect.

In order to overcome the challenges facing the Island and to put Puerto Rico on a sustainable trajectory, it is important for the Government to commit to urgent reform.

Puerto Rico can overcome this current public health and economic crisis. It will be a difficult road ahead over the coming months and years, but the people of Puerto Rico have proven their resiliency. It is with that in mind that the 2020 Fiscal Plan lays out a blueprint for actions that the Government must take to responsibly prepare for the future, notwithstanding uncertainties or further difficulties.

Puerto Rico must urgently adopt a series of bold actions to improve its fiscal and economic trajectory. Long-term trends have only been exacerbated by the impact of COVID-19 and damage from the hurricanes and earthquakes that have ravaged the Island, and

the economic future of the Island is more uncertain than ever. Now more than ever reforms and government efficiency measures are essential to counter negative growth, create the best possible conditions for the people and businesses of Puerto Rico, and to make the Government of Puerto Rico more efficient, effective, and responsive to its residents.

The 2020 Fiscal Plan reflects the fact that the Government has not taken sufficient action to transform government service delivery. As such, it provides a **one-year pause in most categories of government rightsizing to allow the Government to focus on implementation of efficiency reforms.** Rather than further delay progress, the purpose of this pause is to ensure every possibility of successful, focused implementation. The Fiscal Plan includes detailed actions, timelines, and milestones that will require urgent action over several years by the Government to make progress.

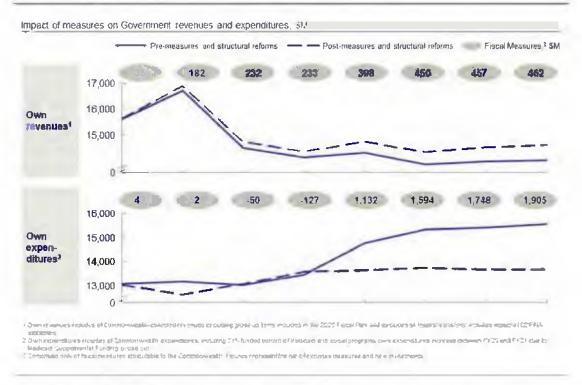
Government efficiency and other fiscal measures

The 2020 Fiscal Plan proposes a set of Government efficiency measures that the Government must take ("measures") to increase government revenues and make government more responsive:

- Agency efficiencies: Consolidating agencies to leverage valuable human and financial resources, centralizing procurement to achieve greater purchasing power and transparency, transforming processes, and deploying new management tools and practices to deliver better governmental services for substantially lower cost
- Creation of Office of the CFO: Instituting fiscal controls and accountability, centralizing fiscal authority, and improving governance, accountability, and transparency over budgets, reform implementation, procurement, and personnel
- Medicaid reform: Taking the necessary steps to curb fraud, waste, and abuse in the healthcare system, ensuring that resources are directed to those in need of health services, and improving health outcomes on the Island
- Enhanced tax compliance and optimized taxes and fees: Employing new technology and other innovative and commonly-used practices in other jurisdictions to broaden the tax base, reduce fraud, and improve fairness to boost overall tax revenues, and adjusting existing taxes and fees to capture revenues from under-leveraged sources
- Reduction of appropriations: Encouraging sound fiscal self-management and
 revenue generation among municipalities and the University of Puerto Rico by reducing
 central Government appropriations, while meeting the needs of students facing financial
 challenges with the creation of an independently-managed, means-tested scholarship fund
- Comprehensive pension reform: Improving the financial stability of public employees through reforms that maintain enough funds to comply with the payment of pensions and provide the administration necessary to create a defined contribution plan for employees

The impact of these measures on revenues and expenditures is demonstrated in Exhibit 2.

EXHIBIT 2: IMPACT OF REVENUE AND EXPENDITURE MEASURES ON OWN REVENUES AND EXPENDITURES



Investment in COVID-19 response and other core priority investments

To ensure successful delivery of the above efficiency measures and to allocate resources to the areas of highest need, the, the 2020 Fiscal Plan also includes substantial investments. Categories of investment include:

- Immediate support for COVID-19 response: Recognizing the imperative for the public health system to focus its efforts on slowing the spread of COVID-19 and healing those affected, as part of the Emergency Measures Support Package certified on March 28, 2020, the Oversight Board approved \$787 million in additional expenditures solely focused on COVID-19 response. These funds are intended to provide "hazard pay" for frontline workers (including public and private nurses and technicians, police, certain correctional staff, and professionals managing taxes and financial operations), medical and public safety supplies and capital expenditures, distance learning in the public education system, and \$100 million in support for municipalities facing reductions in revenue due to the pandemic.
- Investing in critical healthcare infrastructure: The Oversight Board proposed the Government to use remaining FY2020 funds to invest in near-term improvements to the Island's healthcare infrastructure. These opportunities, which have previously been recommended by the Oversight Board but have not yet received Government agreement, represent \$313 million of investment in areas that include addressing critical infrastructure gaps in public hospitals (e.g., the renovation of functionally-obsolete facilities, purchase of power generators), instituting and expanding the use of Electronic Health Record programs, expanding access to care through development of telehealth infrastructure, enhancing access to opioid medication and treatment programs, and providing scholarships to healthcare students who are committed to working in underserved areas of Puerto Rico.

- Enhancing healthcare services: The 2020 Fiscal Plan builds on the strategic healthcare investments from prior Fiscal Plans to stabilize and improve the healthcare system. It directs \$586 million to improve the availability and quality of care under the Medicaid system, maintain nurse and health professional staffing levels, increase hospital capacity through major capital projects, operationalize the Comprehensive Cancer Center, and enable operational efficiencies.
- Safeguarding public safety: The 2020 Fiscal Plan adds to prior investments, enabling almost \$1.3 billion in public safety funding. This includes continuing significant investments made in the May 2019 Fiscal Plan to provide sworn police officers with more competitive salaries and benefits (including, life and disability insurance, Social Security coverage), as well as the final of three installments to cover back pay for police, which represents ~\$122 million in FY2021. These investments are meant to ensure that more sworn officers can remain on Island and serve in the field. Given the emergencies that Puerto Rico has recently experienced, the Oversight Board also believes it is ever more important to ensure that there are enough emergency response personnel available to help residents. The 2020 Fiscal Plan provides funds to recruit paramedics and dispatchers, hire additional specialists at the Forensic Sciences Institute, support salary increases for firefighters, and provide public safety equipment, materials, and vehicles.
- Driving education outcomes: The Oversight Board has long recognized that significant and thoughtful investment in the educational system is key to a stronger economic future for Puerto Rico. The 2020 Fiscal Plan includes over \$760 million for strengthening English Language Learning training for teachers, bringing psychologists on staff to provide evidence-based therapies for Special Education students, hiring additional public-school nurses, driving digitization to improve management and reporting, and compensating transitory teachers and directors, who PRDE mistakenly excluded from the FY2010 and FY2020 salary raises previously funded by the Oversight Board.
- Strengthening the technology sector: Addressing the digital divide is critical to ensuring that all residents of Puerto Rico can take advantage of the well-documented socioeconomic benefits afforded by Internet connections (e.g., telehealth, distance learning, remote work). Important infrastructure gaps remain, particularly across rural areas of the Island. The 2020 Fiscal Plan includes \$400 million to expand access to broadband for the residents of Puerto Rico, thereby improving economic opportunities for those in rural areas. The 2020 Fiscal Plan also recognizes that technology skills are critical for the future of the workforce; it thus includes \$50 million in funding to invest in workforce development, specifically focused on business- and technology-related disciplines.
- Reactivating the manufacturing sector: The COVID-19 pandemic has made it apparent that most raw materials and medical products necessary to ensure national security are manufactured in China, India, and other countries outside the US This represents a unique opportunity for Puerto Rico as a capable and reliable venue for manufacturing under the US flag. As part of implementation of the 2020 Fiscal Plan, the Oversight Board will conduct a comprehensive study to update the facts and acquire the knowledge necessary for the private sector and the Government to define a comprehensive and actionable plan to reactivate the manufacturing sector in Puerto Rico.
- University of Puerto Rico: The 2020 Fiscal Plan provides \$43 million in FY2021 for the UPR scholarship fund and a total of \$179 million over FY2020-FY2025 to meet the needs of the most financially vulnerable students. The 2020 Fiscal Plan also provides \$30 million for an independently-managed scholarship fund for healthcare (e.g., medical, dental, nursing) students and residents who commit to serving in rural and underserved areas.

- Supporting the needs of municipalities: In addition to the \$100 million in support post-COVID-19, the Fiscal Plan includes several investments to support municipalities. These include: \$185 million available through July 31, 2020, for a short-term liquidity facility to ensure that monthly property tax remittances can continue to be advanced to municipalities (given major delays in tax payments), thereby supporting the viability of municipal operations, \$4\$110 million (\$22 million per year through FY2025) as an incentive for voluntary service consolidation, and up to \$92 million to fund demolition and debris removal projects for municipalities in the southwest region of the Island.
- Transforming government services: The 2020 Fiscal Plan includes \$94 million to support hiring of additional staff in core programs (e.g., NAP, GSA procurement initiative) as well as incentives to drive change in government, including to publish the 2017 CAFR, conduct an analysis of the correctional system footprint to enable consolidation, implement a common ERP system, and publish private sector incentives.
- Expediting reconstruction efforts: The 2020 Fiscal Plan provides for \$750 million in working capital to be made available to facilitate FEMA-approved reconstruction efforts. These funds will accelerate rebuilding efforts by providing the necessary capital upfront, with repayment via reimbursement from the Federal Government.⁵

The goal of these investments is to ensure at agencies can continue to provide the services residents depend on while implementing the necessary efficiencies needed to maintain sustainable operations on Island.

Structural reforms

Since 2017, the Oversight Board has worked with the Government to implement numerous structural reforms, but there has been little meaningful progress in most areas. The structural reforms remaining in the 2020 Fiscal Plan are those where there has been alignment with the Government on the need to pursue change. That being said, as a result of natural disasters and poor implementation, meaningful progress on most reforms has been delayed. As such, the 2020 Fiscal Plan provides an updated forecast reflecting such delays but also outlining the potential positive impact looking forward (*Exhibit 3*).

The 2020 Fiscal Plan outlines the following structural reforms:

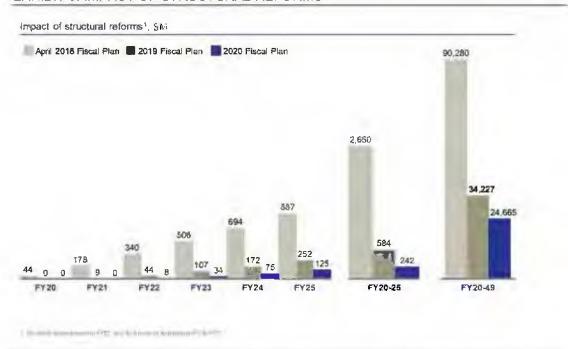
- Human capital and welfare reform: Promoting participation in the formal labor force by creating incentives to work through Earned Income Tax Credit (EITC) benefits and Nutritional Assistance Program (NAP) reform, as well as providing comprehensive workforce development opportunities. EITC and NAP reform are projected to increase the economic growth rate by 0.15% in FY2026.
- K-12 education reform: Transforming the K-12 education system to dramatically improve student outcomes and contribute to an effective workforce in the long-term. Education reforms are projected to add 0.13% to the GNP growth rate between FY2037-2049.
- Ease of doing business reform: Improving the competitiveness and attractiveness of Puerto Rico's economy by reducing the obstacles to starting and sustaining a business through improvements to the processes to obtain permits, register property, and pay taxes; and by establishing best-in-class entities to attract investment and increase tourism. These reforms are projected to drive a 0.30% uptick in overall growth by FY2025.

The liquidity facility is considered a use of the Commonwealth balance sheet, not a Fiscal Plan expense.

⁵ The working capital facility is considered a use of the Commonwealth balance sheet, not a Fiscal Plan expense

- Power sector reform: Providing lower cost and more reliable energy through the transformation of PREPA, the establishment of an independent, expert, and well-funded energy regulator, and the development of cleaner and lower cost power generation. This reform is projected to increase growth by 0.30% by FY2024.
- Infrastructure reform: Integrating all transit assets under PRITA, so it can act as a unitary transit authority managing all transit assets on the Island (e.g., all buses, ferries, Tren Urbano), and reforming the public transportation sector more broadly.

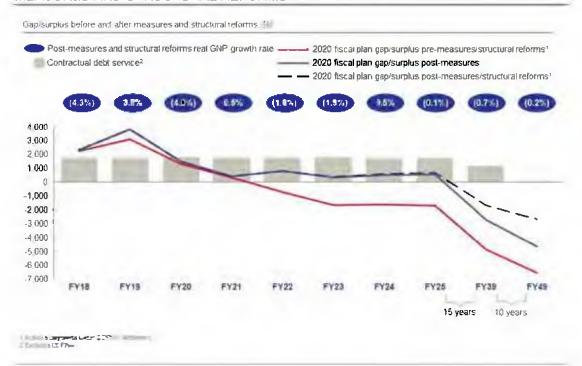
EXHIBIT 3: IMPACT OF STRUCTURAL REFORMS



The 2020 Fiscal Plan includes detailed activities, timelines, and milestones required to achieve this impact.

Implementing these structural reforms and fiscal measures fully on a timely basis will enable the Island to move closer to a reality in which it has low-cost and reliable energy, robust infrastructure, more incentives to enter the formal labor market, an improved regulatory and permitting environment, and a more effective and efficient public sector. That said, these reforms are insufficient to put the Island on a path to growth, nor do they allow Puerto Rico to avoid future deficits, which begin in FY2032 (see Exhibit 4). Thus, in the near future, the Government will be required to take additional measures, such as improving labor market flexibility through repealing restrictive laws and pursuing meaningful tax reform to broaden the base of collection and lower rates. These incremental structural reforms go beyond the five-year framework of this 2020 Fiscal Plan and are required to be able to have balanced budgets moving forward. Many of these reforms – which would reduce deficits and therefore make funds available for a variety of potential uses, most importantly to invest in the people of Puerto Rico – have been proposed by the Oversight Board, but the Oversight Board cannot implement them without the support of Puerto Rico's elected Government.

EXHIBIT 4: 2020 FISCAL PLAN PROJECTED SURPLUS BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS



In conclusion, the Government of Puerto Rico cannot afford to meet its current contractual debt obligations, even with aggressive implementation of the included reforms and measures. The cumulative effect of multiple unprecedented natural disasters, on top of a decade-long secular recession, have left Puerto Rico with substantially diminished resources and capacity. Even with implementation of far-reaching, growth-inducing structural reforms, the 2020 Fiscal Plan projects that the Government cannot afford to meet its current contractual obligations. Recognizing the importance of the ongoing Title III proceedings, but taking into account these realities, the Oversight Board has paused discussion and prosecution of the Plan of Adjustment and the corresponding Disclosure Statement filed on February 28, 2020. The Oversight Board recognizes that the development of the February 2020 Plan of Adjustment proposed a sustainable debt burden for the Commonwealth, while garnering the support of General Obligation and PBA bondholders holding in excess of fifty-nine percent (59%) of such indebtedness, or approximately \$10 billion. This was an important milestone and achieved through the assistance of the Title III Court's mediation team promoting dialogue among the Oversight Board and the Plan Support Agreement Creditors, all acting in good faith to achieve a consensual resolution of the Commonwealth's legacy debts. Clearly, the onset of the COVID-19 pandemic has raised the specter of both near-term and long-term material, adverse impacts from the virus upon the people of Puerto Rico and its economy. While the severity and the duration (including the possibility of recurrence) of the pandemic, as well as the full extent of federal support, are unknown, the Oversight Board's current pause on the implementation of the filed Plan of Adjustment has been, and remains, appropriate and necessary. The 2020 Fiscal Plan lays out a prudent and integrated set of actions to restore fiscal balance in the short term and outlines opportunities for more ambitious additional reforms to create the conditions for long-term fiscal balance.

PART I: Context for Puerto Rico's current economic and fiscal challenges

Chapter 1. Long-term economic trends in Puerto Rico

Even before suffering a series of natural disasters in the form of hurricanes, earthquakes, and the COVID-19 pandemic from 2017-2020, Puerto Rico's economy had been in an acute structural decline for over a decade. The Government had defaulted on much of its debt, and nearly half of Puerto Ricans lived below the national poverty line. The reasons for these problems are multiple, but the root causes stretch back 40 years.

In the 1940s and 1950s, led by Operation Bootstrap, Puerto Rico's economy grew rapidly and productivity increased by 5% per annum as it transitioned from an agricultural-led to a manufacturing-led economy. However, as economic performance began to decline in the 1970s, the federal government adopted two significant policies to help Puerto Rico shore up its economy.

First, transfer programs increased dramatically, particularly as Puerto Rico started receiving Nutritional Assistance Program (NAP) funding, eventually providing, in aggregate, a proportion of residents' personal income that was twice the US mainland average. In addition to raising costs for the Government, these programs, at times, created disincentives to work due to benefits that were high relative to wages available in the formal labor market.

Second, in 1976, Section 936 of the federal tax code was introduced to promote investments by companies that could transfer their "intangible assets" to Puerto Rico, and thereby shift profits to the Island. These Section 936 companies, which were mostly in pharmaceuticals and life sciences, became a pillar of Puerto Rico's economy, creating valuable local supply chains and local banking deposits, and contributing substantial tax revenue. In the same year, Puerto Rico passed Law 80, which instituted protections against wrongful discharge for Puerto Rican workers and mandated severance for firms attempting to remove employees. This law made Puerto Rico's labor market significantly more rigid and placed it out of step with the prevailing labor markets in the US

In 1996, Congress decided to end Section 936, gradually phasing it out by 2006. In the face of an anemic local private sector, the Government also expanded its employment to the point that, by 2000, 30% of Puerto Rico's jobs were in Government and a full 40% of workers with college degrees worked in the public sector. Major sectors such as water, electricity, and ports are still run by public corporations, and have consistently created a drain on the economy by delivering lower quality services at high costs while crowding out private investment. There was also pervasive cross-subsidization among the Commonwealth, public corporations, and other parts of the public sector that obfuscates financial management and accountability. Finally, there was a high degree of political interference in decisions that affect every aspect of Puerto Rican life. As a result, Puerto Rico underperformed on all important measures of a modern economy, including educational attainment, cost of electricity, quality of water, tax compliance, and labor market participation.

To promote the private sector, the Government undertook a broad tax incentives policy that led to a highly complex web of non-transparent subsidies and special tax arrangements. These actions neither promoted growth nor treated companies equitably, often discriminating against Puerto Rican companies in favor of multinational companies. Moreover, this system created no inducement for new investment without similar tax incentives, further eroding the potential tax base. In addition, generous Government and federal transfer programs, taken

together, produced disincentives to formal work, given the potential loss of housing and/or healthcare, while increasing the share of the informal economy. Tax compliance has never been adequate in Puerto Rico, and it became increasingly difficult in this environment.

Government revenues suffered and became increasingly hard to forecast. Taken together with unmanageable and unconnected systems of accounting across Government entities, as well as delayed financial audits, fiscal discipline eroded. To make up for this recurring and growing budgetary shortfall, the Commonwealth turned to debt markets. Puerto Rico bonds found themselves in every corner of the US bond market and, as investor appetite began to wane, the Government turned to securing new debt by conditionally pledging various revenue streams. The result was a highly complex financial structure that limited transparency as well as financial accountability and management.

When the Great Recession hit in 2008, Puerto Rico's economy was already in a fragile fiscal and financial position. Since then, the economy has continued to worsen. Puerto Rico has seen its GNP shrink by 20%, labor force participation fall to a record low of 39%, and population decline by 15%. Puerto Rico is much poorer relative to the mainland US today than it was in 1970.

Chapter 2. Enactment of PROMESA

By 2016, Puerto Rico had accumulated over \$50 billion in unfunded pension liabilities and over \$70 billion of debt and was facing an imminent default. Because Puerto Rico and its public corporations cannot take advantage of Chapter 9 of the US Bankruptcy Code, and an attempt to create a territorial bankruptcy law was struck down by the US Supreme Court, Congress stepped in to head off Puerto Rico's financial and debt crisis by passing the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA). PROMESA imposed an automatic stay on Puerto Rico's debt obligations and created the Financial Oversight and Management Board for Puerto Rico (the "FOMB" or "Oversight Board"). The Oversight Board is tasked with restructuring Puerto Rico's staggering debt burden and restoring sustained economic growth to Puerto Rico so that the Government can achieve fiscal balance and regain access to the capital markets.

Immediately after its formation, the Oversight Board began working with the Government of Puerto Rico to create a Fiscal Plan that would help the Government achieve fiscal responsibility and regain access to the capital markets. The initial outcome of this work was the Commonwealth Fiscal Plan that the Oversight Board certified on March 13, 2017 (the "March 2017 Fiscal Plan"). A few months later, the Oversight Board filed for Title III protection for the Commonwealth Government, COFINA, HTA, ERS, and PREPA. Then, in September 2017, Hurricanes Irma and Maria struck the Island, causing great devastation and fundamentally altering the Island's macroeconomic reality, and ultimately requiring a new Fiscal Plan.

⁶ GNP and population decline represent the change between 2008 and 2018 per data from the World Bank Group's World Development Indicators

Chapter 3. Fiscal plan updates due to natural disasters and emergencies

Over the last three years, the people of Puerto Rico have endured a series of natural disasters and emergencies without precedent in modern history.

On September 6, 2017 and September 20, 2017, respectively, Hurricanes Irma and Maria struck Puerto Rico, causing unprecedented humanitarian, economic, and infrastructure-related damages and upending the daily lives of Puerto Rico's over three million residents. Thousands of residents were left homeless, basic utilities were completely shut down, and schools, hospitals, and businesses were destroyed. Tens of thousands of Puerto Ricans fled the Island. The federal government's response has become one of the largest and most complex disaster recovery efforts in US history.

The damage inflicted on Puerto Rico by the Hurricanes required the March 2017 Fiscal Plan to be revised. Therefore, on October 31, 2017, the Oversight Board formally requested that the Government submit a revised Fiscal Plan for the Commonwealth and its instrumentalities based on the new post-hurricane realities. After months of hard work, engagement with stakeholders, and intense negotiations with the Government, the Oversight Board developed and certified the April 2018 Fiscal Plan to reflect the post-hurricane environment. This Fiscal Plan also provided for the implementation of incremental structural reforms, in particular focusing on improving the competitiveness of the local labor market.

As a result of Government and Oversight Board discussions concerning the necessary legislative actions to deregulate and make the private sector labor market more competitive, the Oversight Board certified an updated Fiscal Plan in May 2018. This Fiscal Plan provided for a series of investments that would be contingent upon the successful implementation of key labor market reforms. Unfortunately, the lack of political will to pass this much needed private sector labor reform required the Oversight Board to update and certify another Fiscal Plan in June 2018 to reflect the removal of this element of structural reform from the plan and the growth forecasts. The October 2018 Fiscal Plan was subsequently certified to reflect actual revenue and expenditure numbers, refined healthcare projections based on actuarial estimates, new federal funding estimates, and changes in the Government's economic growth policy objectives.

The budgetary process under PROMESA requires the annually-certified budget to be consistent with the certified Fiscal Plan. In light of the many variables in the forecasts, the Oversight Board has chosen to annually update and certify a Fiscal Plan for accuracy and to serve as the most updated information for the purposes of certifying an annual budget. As a result, prior to the adoption of the FY2020 Certified Budget, the Oversight Board certified the 2019 Fiscal Plan, which incorporated updates for new information and data from a wide variety of sources. It revised the macroeconomic and population forecast in light of slower disaster recovery funding rollout, faster unwinding of the associated stimulus, and more recent federal and Puerto Rico economic statistics. It also updated the forecasted economic impact of structural reforms to reflect slower than expected implementation. Finally, it rebalanced spending across agencies to enable investments in police and public safety, healthcare, and education.

On December 28, 2019, the first of many earthquakes shook Puerto Rico, registering at a magnitude of 4.7 on the Richter scale. On January 6, 2020, Puerto Rico experienced a 5.8 magnitude earthquake. The next day, Puerto Rico experienced a magnitude 6.4 earthquake, the most destructive earthquake in a century. On that same day, January 7, 2020, the Oversight Board approved the Government's request to access funding from the Emergency Reserve funds for FY2019 and FY2020 (\$260 million in total) in order to bolster the response to the earthquakes. On May 2, 2020, an earthquake with a 5.4 magnitude struck Puerto Rico's southwestern coast. The seismic event, which briefly knocked out power in some areas, hit

near the city of Ponce. This earthquake represented one of 1,000 overall earthquakes of magnitude 3 or greater in 2020, with six being over magnitude 5.5. Hundreds of structures, including homes, local government institutions, small businesses, and houses of worship, have been damaged or destroyed by these devastating shocks. According to a January 29, 2020 report, published by the United States Geological Survey (USGS), there is a high likelihood of continued, material aftershocks. While there will be fewer over time, Puerto Rico continues to be at risk of potentially catastrophic earthquakes.

On top of the Hurricanes and earthquakes, Puerto Rico, like the rest of the world, was confronted, seemingly overnight, with the global COVID-19 pandemic in early 2020, which has required immediate and urgent action.

On March 3, 2020, the Oversight Board made available emergency reserve funds for use in preparedness and response activities related to COVID-19. In so doing, the Oversight Board sought to support the Government's efforts to move quickly and limit the risk to the people of Puerto Rico to the maximum extent possible. On March 15, 2020, Governor Vázquez signed Executive Order 2020-023. This Executive Order directed the "closure of all businesses in Puerto Rico as of March 15 at 6:00 p.m." for two weeks, putting Puerto Rico into lockdown earlier than any US state. The Executive Order also imposed a curfew from 9:00 p.m. through 5:00 a.m. during which time all residents of Puerto Rico were to remain in their residences. However, only businesses related to the distribution of food, medical supplies and equipment, gas, financial and banking institutions, and elderly care centers were excluded and remained open. In addition, the Government closed San Juan Bay to cruise ship vessels effective as of March 17, 2020. On March 30, 2020, Governor Vázquez announced that, based on recommendations from the Government's Health Taskforce and the continuing state of emergency, the closure of businesses and curfew established in the Executive Order was extended until April 12, 2020.

The effects of public health crisis have been far reaching and devastating — both as a humanitarian crisis and economically. To provide additional support to the Island in responding to the COVID-19 pandemic, the Oversight Board, on April 2, 2020, certified the FY2020 Emergency Measures Support Package budget. This \$787 million budgetary allocation was designed to give the Government the resources needed to be able to respond to the significant difficulties arising from the Emergency Measures instituted to contain and mitigate COVID-19. More specifically, it provided direct financial support payments to self-employed individuals and small businesses, bonuses for frontline workers, funding for medical supplies, support to municipalities, and resources for PRDE to purchase equipment to facilitate distance learning.

Governor Vázquez has issued an additional fifteen executive orders in response to COVID-19 to address, among other things, the homeless, school and private sector closures, acquisition of goods and services, use of the National Guard, prompt diagnosis of COVID-19, special leave for public employees affected by COVID-19, the creation of a medical task force to advise Governor Vázquez, and the state of emergency due to the pandemic. Taken together, these measures aim to protect the physical, mental, and economic health of the people of Puerto Rico, while preserving the social fabric of the Island's diverse communities.

Executive Order 2020-033, enacted on April 12, 2020, included an extension of the shelter-in-place directive up to May 3, 2020. It also included a curfew from 9:00 PM to 5:00 AM and authorization to operate a limited number of businesses deemed as essential. On April 14, 2020, Governor Vázquez announced she was amending the curfew established pursuant to EO 2020-33 to be in force from 7:00 PM to 5:00 AM. EO 2020-033 also allowed somewhat more flexibility than previous orders, particularly by trying to promote working from home and

⁷ US Geological Survey, 2020 Southwest Puerto Rico Earthquake Sequence (January 29, 2020)

slightly expanding the list of essential businesses. Since the original March direction, Governor Vázquez has issued several extensions to Puerto Rico's shelter-in-place policy.

On May 1, 2020, the Governor issued Executive Order 2020-038, which extended Puerto Rico's shelter-in-place period until May 25, 2020 but also lifted certain business restrictions to allow limited openings of certain industries, shops, and services at specific times while continuing to observe social distancing rules. This initial reopening is limited to primary and specialist doctors and dentists, animal shelters, vehicle repair and parts services, laundromats, elevator inspections, removals, services to ports and airports, air conditioner repair and maintenance services, notary services, and critical infrastructure services, among others. As the Government observes the results of this limited reopening, the Government will reevaluate and further amend business restrictions as necessary to promote economic recovery while preserving health and safety.

On May 21, 2020, Governor Vázquez issued an executive order that further allowed certain business operations, sports activities and worship services to gradually restart Tuesday, May 26. Social distancing measures apply, and the Island's 7:00 PM to 5:00 AM curfew will remain in effect until June 15.

In order to enhance coordination with the private sector, the Health and Economics task forces were constituted. The Health Taskforce is led by Dr. Segundo Rodríguez, head of the University of Puerto Rico Medical Sciences Campus. The Economics Taskforce, which uses FEMA's Business Emergency Operations Center framework, was implemented in Puerto Rico in the aftermath of Hurricane Maria. With this previous emergency management experience, the Economics Taskforce was able to start executing quickly and is led by Eng. Emilio Colón, former president of the P.R. Homebuilders Association. These decisive and aggressive measures have helped the Island control the infection rate of COVID-19.

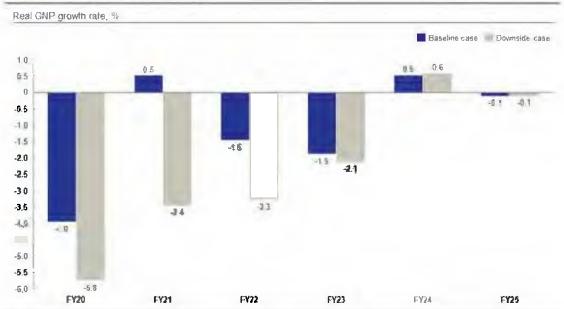
It is with this unprecedented change to the economic and public health climate that the 2020 Fiscal Plan has been certified. As with prior Fiscal Plans, it includes updates for new information about government revenues, expenditures, and reform efforts that have come to light in the past year. It also includes an analysis of the implications of recent earthquakes, and the current global COVID-19 pandemic. In light of the unprecedented uncertainty of the current environment, the 2020 Fiscal Plan displays an alternative downside scenario for informational purposes only that is based on the International Monetary Fund's downside alternative growth projection for the US economy (discussed further in Chapter 4). Finally, it includes a one year delay in incremental government efficiency savings expectations to allow the Government to focus on the implementation of needed efficiency and structural reforms. In FY2021, to the Government must center all efforts on making the necessary changes to how the government operates and delivers government services, as well as taking steps to improve the conditions for investment in the economy in a post-COVID-19 world. Now, more than ever, it is essential that the Government focus all of its attention and capacity on implementation to better serve the people of Puerto Rico in need of efficient government services and to eliminate barriers to economic development and recovery from the unprecedented economic damage caused by this series of disasters.

PART II. Puerto Rico's path to fiscal and economic sustainability

Chapter 4. Macroeconomic and demographic trajectory

The 2020 Fiscal Plan forecasts that the economy of Puerto Rico will shrink by 4.0% in real terms in FY2020, largely due to the COVID-19 pandemic, with a limited recovery of 0.5% in FY2021. This recovery is then followed by negative real growth in FY2022 and FY2023 due to the unwinding of fiscal stimulus from federal funding in the aftermath of multiple natural disasters and emergencies. While the baseline scenario assumes gradual improvements beginning in the summer, under the illustrative alternative downside scenario, which assumes that the pandemic does not recede in the second half of the year, the economy is projected to shrink by 5.8% in FY2020 and again decline by 3.4% in FY2021. Exhibit 5 shows the real GNP growth rates (in both the baseline and illustrative downside scenarios), after the impact of measures, structural reforms, and disaster relief funding.

EXHIBIT 5: REAL GNP GROWTH RATE AFTER MEASURES, STRUCTURAL REFORMS, AND DISASTER RELIEF FUNDING

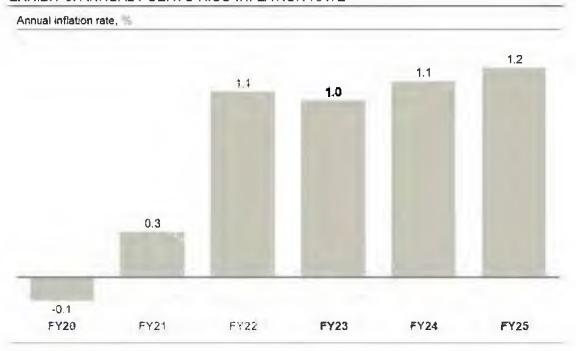


The baseline economic outlook model, which forecasts GNP growth, primarily relies on a comprehensive dataset on the Puerto Rican economy from 1965 to 2017. It includes dozens of variables that collectively describe the Puerto Rican economy (e.g., growth, population, capital stock, etc.), and is largely impacted by four major factors: (a) the pre-hurricane trendline of Puerto Rico, (b) impacts from the shocks of hurricanes, earthquakes, and COVID-19 on economic activity, employment and the capital stock, (c) the stimulative impact of federal and local relief assistance for hurricanes, earthquakes, and COVID-19 (discussed in Section 4.2),

and (d) proposed government efficiency measures and structural reforms (discussed in Sections 4.3 and 4.4).8

The 2020 Fiscal Plan also uses Congressional Budget Office (CBO) US inflation projections along with global forecasts of oil and food prices from the IMF's World Economic Outlook. Puerto Rico inflation projections are summarized in *Exhibit 6* and have been updated to reflect the latest inflation trend prior to the onset of COVID-19, as well as the collapse in world oil prices and the demand shock due to COVID-19 that occurred in the fourth quarter of FY2020. Given these effects, the 2020 Fiscal Plan forecasts effectively zero inflation across FY2020 and FY2021, with a brief dip into deflation in FY2020, followed by a reversion back to a longer-term trend from FY2021 – FY2022.

EXHIBIT 6: ANNUAL PUERTO RICO INFLATION RATE



4.1 Impact of the global COVID-19 pandemic

As the 2020 Fiscal Plan is being written, Puerto Rico is over two years into the period of recovery after the shocks of Hurricanes Irma and Maria, yet without any substantial start in permanent reconstruction activities. As a further matter, the southern part of the Island has recently been hit by the strongest earthquakes that the Island had seen in decades. With the onset of the global COVID-19 pandemic the economy of Puerto Rico virtually ground to a halt, as the public health imperative for people to stay home has left all but the most essential workers unable to travel to their places of business. There is still significant uncertainty about the future of the global, US mainland, and Puerto Rican economies.

The Oversight Board has consulted numerous data sources and expert economists in both Puerto Rico and the mainland to obtain the best insights possible into the current economic conditions and prospects for recovery. However, there is no precedent for COVID-19 in the historical dataset that informs the Fiscal Plan macroeconomic model. As such, the Oversight

The forecast relies on a 60-year comprehensive dataset and applying statistical regressions to show the effects of multiple yet distinct inter-related components of past hurricanes, exogenous developments, and economic policies on growth and inflation.

Board recognizes that there is considerable uncertainty around the near-term economic outlook, as there remains a wide range of potential public health and economic outcomes for Puerto Rico, the nation, and the world. Notwithstanding this uncertainty, the Oversight Board has worked to develop a reasonable base case with the information and experience currently available.

Impact of COVID-19 on the US economy

Consistent with past practice, the Oversight Board primarily relies on US government economic forecasts to establish the general economic conditions within which the economy of Puerto Rico evolves. On April 24, 2020, the CBO released its provisional forecast of US GDP growth for FY2020 and FY2021, showing a real GDP decline of -5.6% in FY2020, followed by a partial recovery of +2.8% in FY2021. The 2020 Fiscal Plan uses this forecast as a key input to create the forecast for the economy of Puerto Rico.

Given the unprecedented uncertainty of the current environment, the 2020 Fiscal Plan also displays an alternative downside scenario for informational purposes only. Rather than relying on current CBO estimates of US mainland growth, this scenario relies on an alternative projection for US growth described in the International Monetary Fund's April 2020 World Economic Outlook. The IMF alternative scenario considers the implications if the pandemic did "not recede in the second half of this year, leading to longer containment periods, worsening financial conditions, and further breakdowns in global supply chains." In that case, the IMF forecasts negative real growth globally in both 2020 and 2021, which the 2020 Fiscal plan estimates implies a -8.7% and -0.7%, decline in US growth, respectively.

Of course, while the Puerto Rican economy is currently experiencing an overwhelmingly negative impact from COVID-19, it is possible that the economy could see some benefit from the crisis. For example, if concerns over global supply chains result in increased domestic pharmaceutical and medical supply manufacturing, and Puerto Rico is able to play a leading role in the national portfolio of locations where this manufacturing relocates, the Island could experience positive growth as a result. However, given their uncertain nature, the 2020 Fiscal Plan does not account for these potential scenarios.

The 2020 Fiscal Plan also does not explicitly include assumptions about the effectiveness of global, US federal, and Puerto Rico measures to contain the spread and impact of COVID-19. Rather, the Oversight Board relies on the embedded assumptions included in the CBO and IMF global and US growth scenarios.

Specific impacts of COVID-19 on the economy of Puerto Rico

After incorporating US mainland growth estimates, the 2020 Fiscal Plan forecasts the specific impacts of the pandemic on Puerto Rico. The approach accounts for two primary factors, which are outlined below: (i) lost income from an enduring spike in unemployment, and (ii) that the relative amount of income that will be replaced either directly by extraordinary government support programs or indirectly as a pass-through from non-labor forms of federal and local spending on the response (e.g., on public health infrastructure, distance learning for education) (see Section 4.2).

To determine the lost income due to COVID-19, the Oversight Board has analyzed available public and private sector forecasts of US unemployment and data from the Government of Puerto Rico on initial unemployment claims through early May 2020. As of May 11, 2020, there were 275,569 initial claims for unemployment filed in Puerto Rico (an average of 34,446)

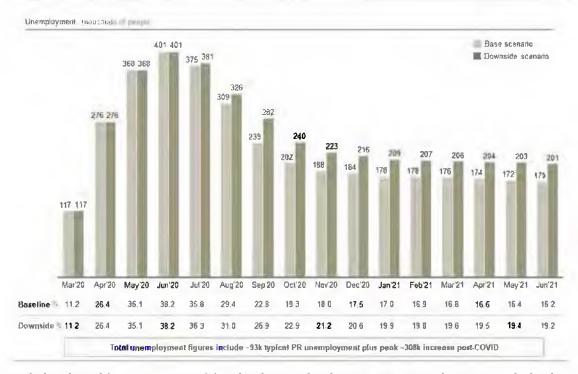
^{9 &}quot;CBO's Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits for 2020 and 2021"

¹⁰ IMF April 2020 World Economic Outlook Press Briefing. Note that the IMF base case is closer to the CBO forecast, and shows a partial economic recovery in 2021.

filing per week) since the onset of the COVID-19 pandemic, well above historical trends of ~2,360 initial claims filings per week.¹¹

Exhibit 7 illustrates the unemployment forecast that the 2020 Fiscal Plan uses to estimate income loss on the Island. The forecast includes a gradual easing of unemployment through FY2021, though unemployment levels at the end of FY2021 are still five percentage points higher than at the onset of the crisis. The exhibit also shows a downside alternative scenario, in which employment is slower to recover.

EXHIBIT 7: PUERTO RICO UNEMPLOYMENT FORECAST



In light of terrible economic hardship for the people of Puerto Rico, and the US as a whole, the federal and local governments have stepped in to provide much needed economic support for residents on the Island. The following sections describe how the 2020 Fiscal Plan treats the combined impact of ongoing disaster relief funding, as well as more recent economic support in light of COVID-19.

4.2 Federal and local relief spending for Hurricanes Maria and Irma, earthquakes, and the global COVID-19 pandemic

4.2.1 Disaster relief spending from the 2017 Hurricanes

Disaster spending tends to have a short-term stimulative effect on an economy post-crisis, though not in the long term. In Puerto Rico, the level of committed public and private disaster relief spending is significant when compared to the overall size of the economy. Public and private disaster relief spending has and will continue to impact the economy in two ways:

¹¹ United States Department of Labor, Employment & Training Administration, Unemployment Insurance Weekly Claims Data. Historical trend represents the weekly average from January 2, 2010 through March 14, 2020.

- Stimulative impact from post-hurricane disaster relief spending that is greater than 100% of the Island's 2018 GNP. This stimulus can come in multiple forms, such as construction companies hiring local, unemployed workers or workers from the mainland US paying local withholding taxes and spending money for food and lodging.
- Expected reconstruction of the capital stock on the Island. The 2020 Fiscal Plan factors in significant damage to capital stock that is repaired, in large part, by this significant infusion of federal and private monies, contributing to growth in the long-term.

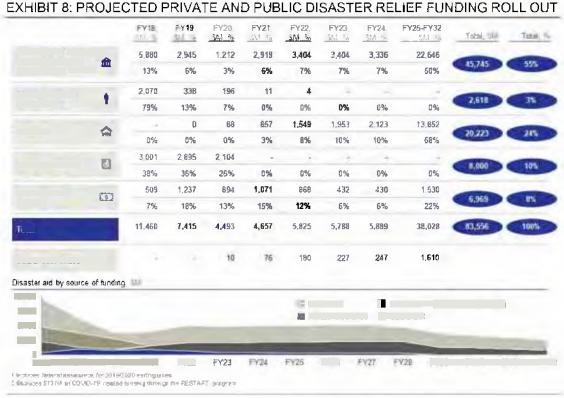
The 2020 Fiscal Plan projects that ~\$83 billion of disaster relief funding in total, from federal and private sources, will be disbursed in the hurricane reconstruction effort over a period of 15 years. It will be used for a mix of funding for individuals (e.g., reconstruction of houses, personal expenditures related to the hurricane such as clothing and supplies), funding for the public (e.g., reconstruction of major infrastructure, roads, and schools), and to cover part of the Commonwealth's share of the cost of disaster relief funding (recipients often must match some portion of federal public assistance spend) (Exhibit 8).¹²

Of the total, ~\$48 billion is estimated to come from FEMA's Disaster Relief Fund (DRF) for Public Assistance, Hazard Mitigation, Mission Assignments, and Individual Assistance. An estimated \$8 billion will come from private and business insurance pay outs, and \$7 billion is related to other sources of federal funding.

The 2020 Fiscal Plan includes ~\$20 billion from the federal Housing and Urban Development (HUD) Community Development Block Grant - Disaster Recovery (CDBG-DR) program, of which ~\$2.4 billion is estimated to be allocated to offset the Commonwealth and its associated entities' expected FEMA-related cost-share requirements. This portion of CDBG-DR funding will go towards covering part of the ~10% cost-share burden on expenditures attributable to the Commonwealth, PREPA, PRASA, and HTA from FY2019 to FY2032. The 2020 Fiscal Plan allocates \$4.7 billion for Puerto Rico's cost-match responsibility. After the CDBG-DR funds, out-of-pocket cost-share is reduced to \$2.9 billion for Puerto Rico, including the provision of \$600 million from FY2020 to FY2032 for Commonwealth cost-match reserve funding in case fewer CDBG-DR funds than anticipated become available in a given year.

Puerto Rico's cost-match responsibility was estimated using FEMA-provided data, adjusted by category as necessary for waivers and exceptions

¹³ Estimate based on early assessment of CDBG-DR Action Plans for Puerto Rico (as published on March 31, 2020), as well as patterns of cost share coverage from CDBG-DR in historical storms



The major sources of disaster relief funding are detailed below:

- FEMA Disaster Relief Fund: FEMA provides Individual Assistance to individuals and families who have sustained uncovered losses due to disasters. FEMA also provides Public Assistance to state and local governments and certain types of private not-for-profits for debris removal, emergency protective measures, and permanent repair to damaged or destroyed infrastructure. Through both its Public Assistance Program and Hazard Mitigation Grant Program, FEMA funds projects to reduce or eliminate long-term risks to people or property from future disasters. 14
- HUD Community Development Block Grant Disaster Recovery (CDBG-DR): HUD provides CDBG-DR funding that can be used for assistance to individuals, businesses, state agencies, non-profit organizations, and economic development agencies. Funds are to be used in the most impacted and distressed areas for disaster relief, long-term recovery, restoration of infrastructure, housing assistance, and economic revitalization. The 2020 Fiscal Plan assumes, based on the supplemental appropriation included in the Bipartisan Budget Act of 2018, that ~\$2 billion will be used to repair the Island's electric infrastructure and ~\$2.4 billion will be used to cover cost-share for the Commonwealth and its instrumentalities. 15
- Private insurance funding: Large personal property and casualty losses have been
 incurred in the aftermath of Hurricane Maria. An analysis of data from the Office of the
 Insurance Commissioner of Puerto Rico, adjusted for self-insured and other types of

¹⁴ The 2020 Fiscal Plan does not attribute economic impact to FEMA's Administrative funding, which is used for FEMA's personnel (primarily outside of Puerto Rico), travel, and other internal costs

As per the Puerto Rico Disaster Recovery Action Plan, April 2020, "the cost share matching requirements of many of these [FEMA] programs create a financial burden on subrecipients that will dramatically hinder the recovery process without supplemental funding. To substantially reduce this burden, PRDOH intends to leverage CDBG-DR to meet these matching fund requirements..."

coverage, was used to determine the amount that has been paid out to individuals and businesses for major damages.

■ Other supplemental federal funding: Additional federal funding has been appropriated to various agencies and projects in Puerto Rico following the hurricane. This money is directed at a wide range of recovery efforts, from reconstruction of damaged buildings (for example, funding to repair damage to Job Corps centers in Puerto Rico) to funding for health programs and environmental management (e.g., USDA funding to repair water systems in rural areas) to additional funds for the Nutritional Assistance Program (NAP).

Disaster roll out for FEMA funds has been projected by subcategory to account for differences in when funds are spent:

- Individual Assistance from FEMA was spent in the immediate aftermath of the storm
- Public Assistance Categories A & B and Mission Assignments are used for debris removal and emergency work, and therefore exhausted in the early years of the recovery
- FEMA Categories C-G and Hazard Mitigation are longer-term funding streams that are spread out over 15 years, based on the latest estimates regarding the time that it will take to finalize reconstruction

Where data on obligations and disbursements of FEMA funds are available (i.e., for FY2018 to FY2020), the 2020 Fiscal Plan estimates actual spending for that fiscal year to be the midpoint between obligations (when funds are officially awarded) and disbursements (when the funds are spent). This is due to the timing lag between obligation and disbursement of such funding. CDBG-DR funds are assumed to be disbursed through FY2032, with program types informed by the Puerto Rico Department of Housing's latest available Action Plans.

The rollout for FY2020 and FY2021 for both FEMA Public Assistance and HUD CDBG-DR have been updated to reflect the expected effects of the COVID-19 pandemic. The 2020 Fiscal Plans assumes that a combination of restrictions on movement, materials, and travel will result in a six- to nine-month delay in the ability to disburse federal funding. To date, FEMA has continued to ramp-up activity and funding for hurricane-related projects; however, given FEMA's increasing role in responding to COVID-19, there will be pressure on FEMA to implement both mandates simultaneously.

The 2020 Fiscal Plan posits that, based on how disaster relief funds are spent, these funds will impact the economy in various ways: to build the capital stock of the Island through constructing and repairing buildings or utilities, to directly impact the economy through spurring consumption of goods and services on the Island, or to fund programs and services on the Island. The 2020 Fiscal Plan estimates a different rate of pass-through to the economy for each of these different types of funding as follows: 16

- A 15.5% pass-through rate is assumed for funding that is used to construct and repair utilities, given the reliance on specialized labor and materials for such projects (e.g., FEMA Category F Public Assistance funding towards constructing public utilities). The rest of this funding flows to the Puerto Rico capital stock and therefore contributes to long-term growth.
- A 23.5% pass-through rate is used for funding that is employed to construct and repair residential, commercial, and school buildings given the ability to rely more on local labor and materials (e.g., repair to public facilities damaged by the storm). The rest of this

Estimated using local contracts for PREPA, residential construction and school construction. These contracts were estimated to have between 10% and 18% pass-through on the economy, respectively, which was then augmented by 5.5% average spend on transportation and logistics on construction projects, which rely on 100% domestic labor.

funding flows to the Puerto Rico capital stock and therefore contributes to long-term growth.

- A 23.5% pass-through rate is assumed for funding that is directed towards programs and services (e.g., private insurance payments to reimburse personal auto expenditures), as this funding hits the Puerto Rico economy through the labor associated with importing and transporting. This type of spending does not contribute to the capital stock on the Island, and therefore does not contribute to long-term growth.
- A 100% pass-through rate is assumed for funding that is used directly and in full to replace income or stimulate spending on goods and services originating on the Island (e.g., disaster nutrition assistance). This type of spending does not contribute to the capital stock on the Island, and therefore does not contribute to long-term growth.
- CDBG-DR funds put toward cost-share are not passed-through to the economy. These
 funds are used towards the local share of FEMA projects whose value is already accounted
 for in the respective categories.

The 2020 Fiscal Plan also assumes that \$750 million in working capital will be made available to address the liquidity constraints associated with the reimbursement nature of disaster relief programs, subject to certain guidelines, restrictions, and best practices that the Oversight Board will establish. This will help to accelerate FEMA-approved reconstruction projects, particularly for permanent projects.¹⁷

4.2.2 Federal and local economic support in response to the earthquakes

The 2020 Fiscal Plan includes \$595 million in funding from FEMA to cover the damage caused by the earthquakes. This estimate (which is included in Exhibit 8 above) includes \$505 million in Public Assistance funding, of which \$438 million is for Category B — Protective Measures, \$54 million is for Public Assistance Management Costs, and \$14 million is for Category A — Debris Removal. The remaining amounts are divided between Individual Assistance (\$80 million) and Mission Assignments (\$10 million). The 2020 Fiscal Plan applies a 23.5% pass-through rate on these funds as they are directed toward the reconstruction of public buildings and facilities (see Section 4.2.1). The earthquake-related federal funding is assumed to impact the economy from FY2020 through FY2023. Additional federal funding (including FEMA Category C-G funding for permanent works) may become available, however, there is no estimate yet of damages that would allow for estimation of this additional federal funding.

4.2.3 Federal and local economic support in response to the COVID-19 pandemic

In response to the COVID-19 pandemic, both the Federal Government and Puerto Rico Government have launched major relief packages to contain and mitigate the spread of the pandemic, support residents and frontline workers, and help the Island's economy rebound.

On March 6, 2020, President Trump signed an \$8.3 billion emergency COVID-19 aid package. At least \$1.05 billion of this package will be distributed to state, local, and tribal government efforts through grants and cooperative agreements with the Centers for Disease Control and Prevention or as reimbursements from the Federal Government. The initial federal aid package was focused largely on public health concerns.

On March 13, 2020, President Trump declared a national emergency in response to the COVID-19 pandemic. The declaration allows the administration to utilize the Stafford Act, a

¹⁷ The working capital facility is considered a use of the Commonwealth balance sheet, not a Fiscal Plan expense.

federal law governing disaster-relief efforts and makes \$50 billion in emergency funding available to states and territories.

On March 18, 2020, the Families First Coronavirus Aid Package was signed into law. The bill includes free COVID-19 testing for uninsured individuals, emergency paid sick leave, expanded family and medical leave programs, unemployment assistance, food aid, and federal funding for Medicaid.

A third phase of federal COVID-19 relief, the Coronavirus Aid, Relief, and Economic Security ("CARES") Act, was signed into law on March 27, 2020. The relief package allocates an estimated \$2.2 trillion to battle the harmful effects of the COVID-19 pandemic. The package is the largest fiscal stimulus package in modern American history and aims to financially support both governments and businesses, provide relief to individuals, and expand COVID-19 response measures, as well as build future resiliency. The bill includes \$150 billion of direct support to state and local governments. In addition, eligible individuals will each receive a \$1,200 direct payment, as well as an additional \$500 for each dependent child, in each case subject to income phase-outs. The bill also provides for additional unemployment insurance benefits for individuals impacted by COVID-19, including incremental benefits of \$600 per week through July 31, 2020 and a 13-week extension in the amount of time than an individual may collect benefits (from 26 to 39 weeks). On April 24, 2020, the US government passed the Paycheck Protection Program and Health Care Enhancement Act, which can be considered as an extension of the CARES Act. This package provides an additional \$482 billion for small businesses, healthcare providers, and expanded testing to address the COVID-19 pandemic.

The 2020 Fiscal Plan includes an estimate, shown in *Exhibit 9* below, of what portion of these federal funds will be allocated to Puerto Rico, relying on a combination of direct federal government sources and agency announcements, and, in some cases, based on historical analogy (e.g., the American Recovery and Reconstruction Act of 2009).

	Category	Title(s)/Section(s)	Estimated US Funding,	Estimated Puert
and 03/18)	Phase 1: Preparedness & Response Supp. Approp. Act	Multiple	8,267	3
	Phase 2: Families First Coronavirus Response Act	Multiple	108,327	36
	Sub-Total, Phase 1 & 2		116.594	39
	Emergency Relief and Taxpeyer Protections (corporate loans)	4002, 4003 (189)	458,328	50
	Emergency Relief and Taxpayer Protections (sirfnes)	4002, 4003 (189)	46,000	
	Coronavirus Relief Fund	5001 (221)	150,000	2,24
	Federal Transit Administration	Title (01 (319)	25,009	16
	Governor's Emergency Education Relief Fund	Title XII (284)	2,953	
	Elementary and Secondary School Emergency Relief Fund	Title XII (284)	13,229	3
	Higher Education Emergency Reliaf Fund	Title XII (284)	13,953	3.
	Community Development Fund	Tale XII (326)	5,000	
	Homelese Assistance Grants	Title XII (328)	4,000	
	State and Local Law Enforcement Activities	Title II (233)	850	
	Recovery Rebates for Individuals	2201 (55)	292 374	3,0
7	Pandenic Unemployment Assistance	2102 (33), 2104 (38)	260,000	3,4
	Paycheck Protection Program	1102, 1106 (6)	350,000	6
	Public Health and Social Services Emergency Fund	Title VIII (283), Title VIII (280)	146,360	2
	Domestic Food Programs	Title I (227), Title I (228)	25.063	2:
	Deferred Taxes For Businesses	Multiple	249,613	3
	All Other CARES Act Measures	Multiple	67,958	2
	Other Government incentives	Multiple	10,579	
	Individual tax incentives	Multiple	10,202	
	Disaster Relief Fund	Title VI	45.000	2
	SBA - EDL Loses and Grants	Title I	27,038	
	Housing assistance (Other)	Mulliple	3,423	
	Education (Other)	Title VIII	615	
	National Quard	Multiple	1,491	
	Sub-Total, J.0 CARES Act		2,209,036	12,3
	Incremental Paycheck Protection Program	Amendment to CARES	322,100	1,0
		Amendment to CARES	60,000	
	Incremental Hospital Funding	Amendment to CARES	75,000	
	Incremental Coronavirus Testing Funding	Amendment to CARES	25.000	
	Sub-Total, 3.5 CARES Act		462,100	12
			2.807.730	13.9

¹ Additional payous will come from Commonwealth spending, but are grouped together here as stimulus along with the related themployment it is unance terms in the CARES act 3 flex too station being considered would extend the related to a considered to a considered would extend the related to a considered to a considered would extend the related to a considered would extend the related to a considered to a considered

In addition to the federal stimulus package, the Puerto Rico Government, with the support of the Oversight Board, announced a package of direct assistance to workers and businesses amounting to approximately \$787 million, as shown in *Exhibit 10*, of which \$500 million was incremental new spending (made available via a special appropriation), \$131 million was for education related materials through existing federally-funded government contracts, and \$157 million was reapportioned within the FY2020 Commonwealth General Fund budget. The budget for this Emergency Measures Support Package was certified by the Oversight Board on April 2, 2020. It is assumed in this 2020 Fiscal Plan that approximately \$336 million of this aid package may be eligible for reimbursement from the \$2.2 billion of funding allocated to Puerto Rico under the CARES Act.

	Category	Description	FE TOL
Direct Payment to Self-Employed	Self-Employed	one time cash payment for approximately 300,000 self-employed individuals.	
Direct payment to small businesses	Small businesses	51,500 one-time cash payment (prapproximately 40,000 small businesses	60,0
	Public Nurses	\$4,000 bonus per nurse (not including 272 Dept. of Correctional Health nurses; separate line)	21.
	Private Sector Nurses	Bonus for private sector nurses	744
COLUMN TO A SECURE	Professional services nurses	Bonus for professional services nurses	221
	Dept of Correctional Health nurses	\$4,000 bonus per nurse	
	Techniciana	\$2,500 bonus for 600 technicians	1,
	Othera	Public sector pharmacists (116), medical technologists (3,834), Residents-MD (605)	4.3
	EMS personnel	581 slaft	21
	Police Officers	11,650 front office roles (does not include 600 currently reported under leave of absence)	46.6
	Firefighters.	1,455 front office roles (does not include 55 reported under lesive of absence)	4.1
	Emergency Management	112 front office roles (does not include 12 reported under leave of absence)	0.4
	9/1/2011	154 front office roles (does not include 2 reported under leave of ebsence)	113
	Special Investigations Unit	74 front office roles	0.3
	Forensics	220 front of fice roles	0.0
	Municipal police	\$4,000 benus for 3,428 officers	13.7
	Municipal firefighters	\$3,500 benua for 50 officers	E-0
		\$1,000 benus for 400 officers	0.5
		\$2,000 benus for 250 aggents	17
Revenue Agents			
r	Dept. of Education teachers, students, and directors	Purchase of tablets, software, training for approximately 325,000 and viduals	1243
	and dreddra	Materials for 159,339 individuals will be paid by the U.S. Department of Education through two contracts.	130.
		\$15M per month for two months for medical supplies not directly related to COVID-19, materials related to COVID-19 are covered with \$160M from Emergency Reserve and Federal Funding	30.1
		\$28M for equipment and capital expendences	20,1
		\$50M per month for two months based on a 3-tier division of population by municipally	100,1
	Department of Corrections	\$3,500 bonus per front-ine Corrections staff	16.1
	Correctional Health	\$3,500 bonus per front-ine Correctional Health staff (non-nurses)	0.5
		Loss of outstanding \$3M monthly receipts for two months	6.6
	Reserve	Reserve (will be transferred to first responders and healthcare agencies an an as-needed basis to cover any deficiency in the distribution of the cash incentives. Numbers are based on estimates, actual disbursements may vary from this estimates?	1.1
Fotal Local Funding			787

These funds will play an essential role in helping to mitigate the unprecedented economic damage from the sudden economic shock caused by the pandemic.

The 2020 Fiscal Plan incorporates the combined effect of federal and local economic support in three ways. First, certain types of funding intended to prevent revenue and job loss are assumed to mitigate what otherwise would have been even higher unemployment and revenue loss had those funds not been provided. These funds are implicitly reflected in the 2020 Fiscal Plan because, without them, the income loss estimates would have been larger. The federal Paycheck Protection Program, which is designed to encourage businesses to keep employees on the payroll, is one example of this type of funding

The second type of funds are those administered through economic support programs designed to provide *income support directly from the federal or local government*. Examples include unemployment benefits, economic impact payments, and direct payments to small businesses and self-employed.

Finally, for government expenditures and programs funded by federal and local economic support programs, the 2020 Fiscal Plan uses the same approach as it does in estimating the pass-through of these expenditures to Puerto Rico as has been used for other types of economic stimulus funding such as disaster-recovery spending. Specific pass-through rates used on this funding are detailed below:

- A 23.5% pass-through rate is applied to spending on government programs and services.
 Examples include funding for law enforcement and the National Guard in Puerto Rico.
- A 5.5% pass-through rate is assumed for funding that is primarily directed to acquisition of goods that will predominantly be sourced off-Island. This funding impacts the Puerto

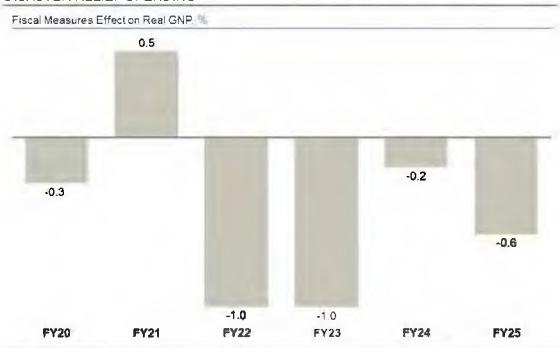
Rican economy only through the on-island transportation of such goods. Examples of this are testing and medical equipment, or educational supplies to facilitate distance learning.

The economic impact of the local and federal relief funds occurs in FY2020 and FY2021. These funds help counter the income loss on the Island but cannot fully prevent the negative impact on business activity caused by the pandemic.

4.3 Impact of fiscal or Government efficiency measures

Government efficiency measures seek to streamline and transform the Government of Puerto Rico to deliver critical government services to the population and business sector more efficiently by optimizing revenue collection and reducing government-wide expenditures, while ensuring sustainability of those services over time given population trends. Such policy actions will generate a contractionary impact on the economy in the short term but are necessary to drive government efficiency and fiscal sustainability, as well as improve service delivery, in the long term. The net effect of these two forces is still significantly positive from a fiscal savings perspective through FY2049. The short-term macroeconomic impact of the measures is summarized in Exhibit 11.

EXHIBIT 11: MACROECONOMIC IMPACT OF FISCAL MEASURES, INCLUSIVE OF DISASTER RELIEF SPENDING



The 2020 Fiscal Plan assumes that the fiscal impact of disaster relief spending and fiscal measures is not permanent, but rather is unwound over the course of several years. The 2020 Fiscal Plan unwinds these over five years, as model-based and econometric studies find that the output effect of an exogenous fiscal shock typically disappears within five years, even if fiscal measures are permanent.¹⁸

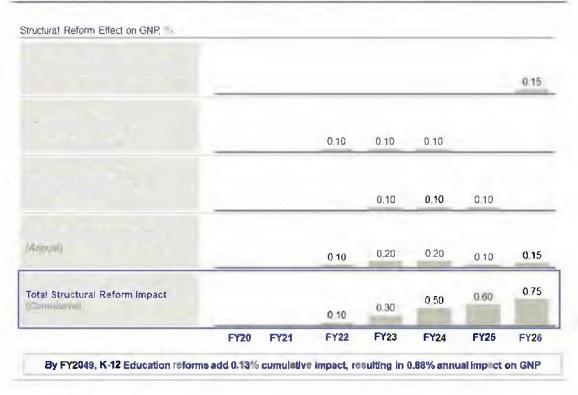
Batini, N. Eyraud, L. and Weber, A. "A Simple Method to Compute Fiscal Multipliers", IMF Working Paper WP/14/93, as well as Mountford, A. and Uhlig, H. "What are the Effects of Fiscal Policy Shocks?" <u>Journal of Applied Econometrics</u>, 24: 960-992 (2009) and Jorda, O. and Taylor, A. "The Time for Austerity: Estimating the Average Treatment Effect of Fiscal Policy," <u>Economic Journal</u>, 126: 219-255, February 2015.

4.4 Impact of structural reforms

The estimated impact of **structural reforms** is based on work done by the International Monetary Fund on labor reforms implemented in Europe (e.g., Spain and Estonia) and South America (e.g., Peru and Colombia), among other jurisdictions; utilities reform in Latin America; broadly-accepted metrics for measuring improvement in the World Bank's Ease of Doing Business Rankings (as well as case examples of growth experienced by countries that have implemented such reforms); and education reforms in Europe and elsewhere. Structural reform benchmarks, to the extent possible, come from nations or jurisdictions that face similar constraints to Puerto Rico (e.g., limited monetary policy options, high informal labor markets).

Energy and ease of doing business reforms are projected to increase GNP by 0.60% by FY2025, and Human Capital and welfare reform is expected to add another 0.15% in FY2026 (Exhibit 12). Finally, K-12 education reforms add an additional 0.01% annual impact beginning in FY2037, resulting in total GNP increase from structural reforms of 0.75% by FY2026 and 0.88% by FY2049. The anticipated timing of the incremental positive impact of these reforms has been delayed in this Fiscal Plan given the delay in the Government's implementation efforts.

EXHIBIT 12: MACROECONOMIC IMPACT OF STRUCTURAL REFORMS



4.5 Population projections

Even before Hurricanes Maria and Irma hit the Island in 2017, Puerto Rico's population had been trending downward by 1-2% every year as residents have left to seek opportunities elsewhere and birth rates declined. In 2016, the US Census Bureau's official forecast, projected a worsening population outlook due in large part to Puerto Rico's rapidly-aging population. This high average age range results from extremely low age-adjusted birth rates and outmigration of younger people. Indeed, in 2016, Puerto Rico began to experience negative

natural population change (a higher number of deaths than births). This negative natural change has continued unabated into 2020.

Hurricanes Irma and Maria served to compound the problem, spurring an additional outflow of people just as natural population decline has set in, as many residents lost houses, jobs, and loved ones. While some of these people have returned, the population is still projected to decline over the course of the 2020 Fiscal Plan period (*Exhibit 13*) and beyond. Further disasters, such as the series of earthquakes experienced in 2020, have not made a swift return to balanced migration any more likely. But while net migration is a larger driver of population change in the short term, this factor is volatile; in the long run, net migration is projected to return to more balanced trends. Meanwhile, natural population change is not guaranteed to rebalance at any point, and births are likely to continue declining, while deaths are projected to rise or stay stable.

The COVID-19 pandemic has been less severe in Puerto Rico than in many other areas thus far, and therefore no large epidemic-driven mortality rate increase is anticipated. COVID-19 is expected to suppress air traffic between Puerto Rico and the mainland, and thus impact migration, but this effect will be transitory.

As outlined in *Exhibit 13* below, this 2020 Fiscal Plan projects that by FY2025, there will be 9% fewer people living on the Island than in FY2019, and that by FY2049, the drop will grow to 30%.

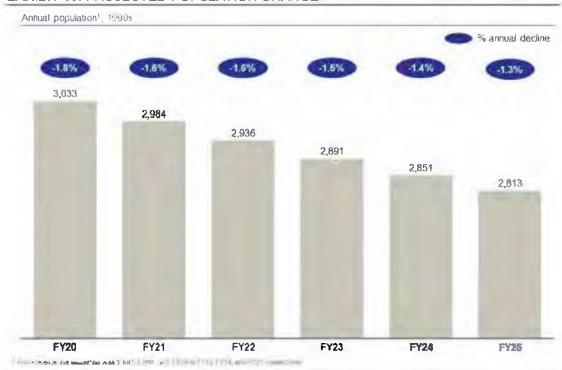


EXHIBIT 13: PROJECTED POPULATION CHANGE

4.6 Impact of First Circuit ruling on Supplemental Security Income benefits

On April 10, 2020, the US Court of Appeals for the First Circuit issued a ruling in a case related to the eligibility of Puerto Rico residents for Supplemental Security Income ("SSI") benefits

(US v. Vaello-Madero, 2020). SSI provides "monthly benefits to people with limited income and resources who are disabled, blind, or age 65 or older. Blind or disabled children may also get SSI." SSI benefits have been available to otherwise qualifying residents of the 50 states, the District of Columbia, and the Northern Mariana Islands. Residents of Puerto Rico, however, have not been eligible for SSI benefits.

The case involved an SSI recipient who moved from New York to Puerto Rico and was subsequently required to repay SSI benefits received while the recipient was resident in Puerto Rico. The court ruled in favor of the recipient, finding the exclusion of Puerto Rico residents from SSI coverage to be invalid.

The court's finding is consequential, but the path forward is highly uncertain. The US Department of Justice has not indicated whether it intends to appeal the court's ruling, and the Social Security Administration, which administers SSI benefits, has not issued public guidance on how it will address the ruling of the court or on what time frame it will do so.

If SSI benefits were ultimately extended to eligible residents of Puerto Rico, initial analysis suggests that it could provide over \$1 billion in incremental annual federal transfers to Puerto Rico. This amount would undoubtedly be welcome support to qualifying residents across the Island and could enable some level of increased consumption. The ultimate economic impact of these transfers is unclear, however, and will be examined in future Fiscal Plans. As of the time of certification of the 2020 Fiscal Plan, there is no information as to when and how the benefits will become available to residents of Puerto Rico, how the Government of Puerto Rico will work with the Social Security Administration to implement the changes, and what program integrity steps will be taken to ensure only those eligible receive it.

Chapter 5. Fiscal Plan financial projections (FY2020-FY2025)

The COVID-19 pandemic will have a profound impact on economic growth and, ultimately, on Government revenues. In a recent report, Moody's Investor Services stated "it will take years for state revenue to return to 2019 levels without tax increases, while recovery to a level where no COVID-19 crisis occurred is unlikely over a five-year horizon."²⁰ The impact to Puerto Rico is expected to be no less severe, with a real GNP decline in FY2020 of -4.0% will change the trajectory of economic activity in Puerto Rico over the entire forecast period.

As a consequence of this new economic reality, before measures and structural reforms (i.e., in the "baseline forecast"), there is a pre-contractual debt service deficit for all years of the 2020 Fiscal Plan.²¹ This deficit gets worse over time, as federal disaster relief funding slows down, Supplemental Medicaid funding phases out, Act 154 and Non-Resident Withholding revenues decline, and healthcare expenditures rise.

The fiscal measures and structural reforms contained in the 2020 Fiscal Plan are the main drivers for a significant portion of the surplus in the 2020 Fiscal Plan. Fiscal measures will drive ~\$10.0 billion in savings and extra revenue over FY2020-FY2025 and structural reforms will drive a cumulative 0.88% increase in growth by FY2049 (equal to ~\$24.7 billion). However, even after fiscal measures and structural reforms, and before contractual debt service, there is an annual deficit reflected in the projections starting in FY2032. This is, in

¹⁹ Understanding Supplemental Security Income (SSI) Overview -- 2020 Edition, US Social Security Administration

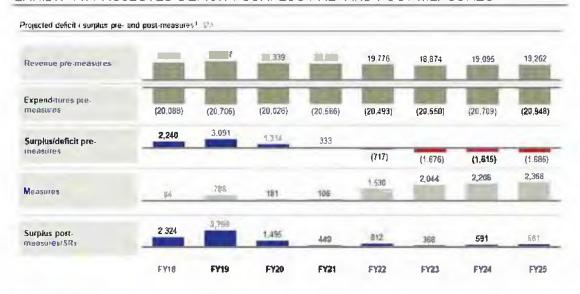
²⁰ Moody's Investors Service, April 24, 2020: "Revenue recovery from coronavirus hit will lag GDP revival, prolonging budget woes"

²¹ The baseline forecast also reflects the pledge of a portion of annual SUT revenues to COFINA creditors as per the terms of the COFINA Title III Plan of Adjustment.

large part, due to insufficient structural reforms, including continued highly regulated and restrictive private sector labor market policies that prevent higher growth, a lack of progress in rolling out the NAP work requirement to increase labor force participation rates, and more meaningful Ease of Doing Business reforms to improve the economy's competitiveness and attract greater levels of investment and job creation. Exhibit 14 illustrates the projected deficit / surplus through FY2025.

Projections for FY2026 onwards are included in Chapter 6.

EXHIBIT 14: PROJECTED DEFICIT / SURPLUS PRE- AND POST-MEASURES



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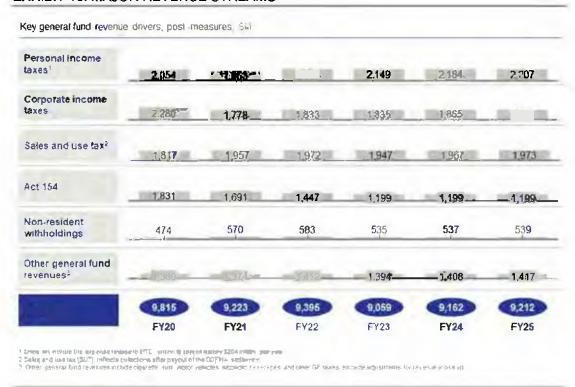
Baseline revenue forecast 5.1

Major revenue streams (Exhibit 15) include non-export sector General Fund revenues (including individual, corporate, and sales and use taxes) and export sector revenues (including Act 154 excise taxes paid by multinationals operating on the Island, and Non-Resident Withholdings), as well as federal funding. The 2020 Fiscal Plan also includes clawback revenues in the Commonwealth's revenue streams and surplus calculations; this is based on the Oversight Board's legal conclusions that (i) such monies are property of the Commonwealth, (ii) each statute appropriating or transferring such monies to instrumentalities of the Commonwealth is preempted by PROMESA, (iii) such statutes were enacted by prior legislatures that cannot bind the current legislature, and (iv) in any event, under the Puerto Rico Constitution, such monies would not be transferred to the instrumentalities while General Obligation debt is not being paid according to its terms.

The 2020 Fiscal Plan generally reflects the revenue impact of COVID-19 in line with the estimates of macroeconomic impact described in Section 4.1. There is expected to be significant near-term uncertainty in the level of revenue collections as the expected duration and severity of the COVID-19 induced recession is constantly evolving. Personal income taxes will be significantly impacted by high unemployment. Consumption taxes will be impacted by lower overall economic activity. The 2020 Fiscal Plan estimates these impacts based on the information currently available. Relative to the 2019 Fiscal Plan, general fund revenues are expected to be 12% lower in FY2020 and 11% lower in FY 2021.²²

Administrative actions taken to delay tax payment due dates had the effect of delaying receipt of ~\$668 million in taxes otherwise due in FY2020 to FY2021, according to Hacienda estimates. The 2020 Fiscal Plan treats these revenues as FY2020 tax revenues even though for some taxes the deadline for payment has been extended to early FY2021. The 2020 Fiscal Plan also forecasts that 10% of these revenues will not be received due to taxpayer inability to pay. The Oversight Board will work with Hacienda to track these receipts and adjust for actuals, including losses due to taxpayer inability to pay. In addition, ~\$44 million in FY2020 SUT collections will be foregone as a result of tax exemptions on prepared food and on purchases for COVID-19-related first-aid items through May 2020





Additional details on the fiscal plan revenue streams are provided below, with details on the financial projections included in the Appendix. The following sections describe the longer-term approach to estimating revenues for key revenue streams.

5.1.1 Non-export sector General Fund revenue projections

Individual income taxes: Individual income taxes are highly concentrated, with 78.2% of revenues coming from the 8.7% of returns reporting income above \$60,000 in FY2018.²³ The 2020 Fiscal Plan also incorporates the expected incremental tax collections associated with disaster recovery spending. Individual income tax collections outperformed relative to GNP growth in FY2018 and FY2019, and were on trend to do so again in FY2020 prior to the onset of COVID-19. The 2020 Fiscal Plan projects that disaster recovery spending will continue to contribute to the income tax base, either through mainland workers temporarily working in

Adjusted for one-time corporate income tax payments not included in the 2019 Fiscal Plan forecasts

²³ Hacienda historical reports as of April 2018

Puerto Rico or from Puerto Rican residents entering the formal economy as a result of disaster recovery projects.

Corporate income taxes: There is also concentration in tax receipts among the largest corporations operating in Puerto Rico (e.g., ~29% of corporate income taxes are paid by 20 corporate taxpayers).²⁴ Historical aggregated data from Hacienda showed an influx of corporate activity spurred by reconstruction funding and mainland-based firms entering the Island economy. This had led to higher corporate income taxes relative to GNP in FY2018 and FY2019, and this trend was continuing in FY2020 prior to the onset of COVID-19. The 2020 Fiscal Plan incorporates the contribution of disaster recovery spending into future years. The 2020 Fiscal Plan projections reflect certain adjustments to corporate income tax revenues attributable to one-time M&A activity which resulted in a non-recurring \$488 million of revenues in FY2020 and \$73 million in reduced corporate income taxes starting in FY2021, as projected by Hacienda.

Sales and use taxes (SUT): As with corporate and personal income taxes, SUT outperformed relative to GNP in FY2018 and FY2019, likely boosted by the increased economic activity resulting from the post-disaster reconstruction process (including through the replacement of lost inventory), as well as higher SUT compliance by those larger firms less impacted by the storm. The 2020 Fiscal Plan incorporates this incremental tax collection as disaster recovery continues in future years. Following the COFINA Title III Plan of Adjustment, a portion of SUT collections will be used to pay the settlement going forward. This portion reaches ~\$1 billion annually starting in FY2041.

Other General Fund revenue (Motor Vehicles, Alcoholic Beverages, Cigarettes): Motor vehicle revenue tax receipts surged in FY2018 and this trend continued into FY2020, as residents accelerated motor vehicles purchases in the aftermath of the storm. The 2020 Fiscal Plan reflects accelerated purchasing of motor vehicles that subsides and returns to historical trends over multiple years. The 2020 Fiscal Plan also reiterates a need for Hacienda to address challenges with cigarette taxes, which were \$72 million short of required collections in FY2019. This trend was continuing in FY2020 pre-COVID-19, as Hacienda has yet to take steps to recover the lost revenues.

Export sector revenue projections: Act 154 and Non-Resident Withholding (NRW) tax revenues are concentrated in a small number of multinational corporations. From FY2017 to FY2023, the 2020 Fiscal Plan estimates that Act 154 and NRW revenues will erode due to US federal tax reform (reducing Puerto Rico's attractiveness as a low tax jurisdiction for multinationals), global supply chain diversification, and patent expirations.

5.1.2 Medicaid funding

On a steady-state basis (i.e., in the absence of supplemental federal legislation), Medicaid costs are funded primarily by the Commonwealth, as there is a cap on available federal funding. Typical annual federal funding streams for the Commonwealth are the following, and are projected based on current law and statutory growth rates:

■ Standard annual federal Medicaid funding. Although Puerto Rico has a 55% federal matching assistance percentage (FMAP), the amount of annual federal funding received under Section 1108 is capped each year. For FY2020, this funding stream was expected to be capped at \$380.3 million, and though the cap grows each year according to the Medical CPI-U, it does not keep pace with healthcare expenditure growth.²⁵ Each year, ~\$100

²⁴ Hacienda historical reports as of April 2018

²⁵ According to §1108(g) of the Social Security Act., from 2011 to 2016, the cap grows by the medical component of CPI-U as reported by BLS each year. From FY2011-FY2016, this growth averaged 2.9%. This inflation rate differs from the healthcare inflation index for Medicaid and Medicare used elsewhere in the 2020 Fiscal Plan (4.5% to 5.5% from FY2020-FY2022, decreasing to 4.75% in FY2049). Instead, the medical component of CPI-U includes other factors that lower the inflation rate

million of these funds are not available to cover premium expenses, but rather are transferred to the Department of Health to cover disbursements to Federally Qualified Health Centers ("Centros 330" or "FQHC") and Medicaid Program operations.

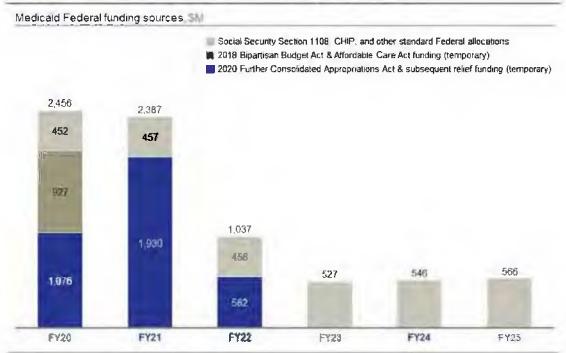
- Children's Health Insurance Program (CHIP) funding. CHIP funding is not subject to a federal funding cap. Without additional legislation, the CHIP matching rate (E-FMAP) for Puerto Rico is expected to be 68.5%. Under the Affordable Care Act, the E-FMAP for Puerto Rico was raised to 91.5% through September 30, 2019; under the 2020 Further Consolidated Appropriations Act, the E-FMAP was increased to 83.2% through September 30, 2021 (with an additional 11.5% increase through September 30, 2020 under the 2018 HEALTHY KIDS Act); and under the Families First Coronavirus Response Act, the E-FMAP was increased to 99.0%. When these pieces of legislation expire in October 2021, the federal cost share is projected to decrease to the standard level (~68.5%).²⁶
- Increases in available Medicaid funding from federal legislation: Since 2011, Puerto Rico has received temporary relief from rising healthcare costs through increased levels of federal reimbursement made available through the passage of the Affordable Care Act and the Bipartisan Budget Act of 2018. In December 2019, the Further Consolidated Appropriations Act was passed, which provided supplemental federal funding (up to \$5.7B in total) to Puerto Rico's Medicaid program through September 30, 2021 (i.e., the first quarter of FY2022). In addition, the law raised the FMAP-the portion of Medicaid expenditures that federal funds can cover—from the standard level of 55% to 76% for most populations. Finally, as mentioned above, in response to the COVID-19 pandemic, the Families First Coronavirus Response Act was passed in March 2020, further increasing both the available federal funds (adding an additional \$183M) and the FMAP (increased by an additional 6.2% for most populations). The available supplemental federal funds and higher FMAP will both return to standard levels in October 2021 without new federal legislation. Accordingly, the Commonwealth will hit a "Medicaid fiscal cliff," whereby it will be responsible for multi-billion-dollar annual healthcare expenditures that had previously been covered by federal funding since 2011. The 2020 Fiscal Plan does not assume future legislation changes. The 2020 Fiscal Plan ensures that the Commonwealth is fiscally responsible under current law, and factors in the cost of Medicaid going forward in the absence of incremental legislation. To ensure healthcare for a substantial part of the population, the Commonwealth must be able to pay and manage these critical costs, which grow faster than inflation, regardless of the future federal legislative environment.

Exhibit 16 outlines expected Medicaid federal fund receipts. After the first quarter of FY2022 (ending September 30, 2021), supplemental federal funding is projected to phase out. This "funding cliff" further exacerbates the imperative and urgent need to implement cost-saving measures to reduce long-term Medicaid costs (Medicaid expenditures are discussed in detail in Section 5.2.4). All projections are based exclusively on legislation that is currently in force.

by approximately 3-5 percentage-points, meaning the increase in the federal funding cap will not keep up with actual increases in excenditures

²⁶ MACPAC: "Medicaid and CHIP in the Territories" (April 2020)





5.1.3 Other federal funding

In addition to Medicaid funding, Puerto Rico receives other federal funds on a regular basis. These are not to be confused with disaster relief funds, which are directly tied to Hurricane Maria and earthquake reconstruction activity, or with COVID-19 response and relief funds, which are meant to cover incremental government spend to respond to the global pandemic. These funds typically cover both social benefits and operational expenditures. In the 2020 Fiscal Plan, these funds have been modeled based on what types of costs they cover (e.g., benefits or operations) as well as statutory formulas that define the size of Puerto Rico's allotment. For example, while Temporary Assistance for Needy Families (TANF) funds are typically pass-through (e.g., none of these funds go to operational costs), some Title I education funds are used for operational purposes (e.g., teachers' salaries, school supplies for programs for students with special needs, etc.). For the former, federal fund inflows and outflows mirror each other (as benefit needs decline, so do funds). For the latter, though inflows may decline, it does not necessarily mean expenditures decline as well - as expenditures are based on operations, not on benefits formulas, and the Commonwealth may have to fund the operations notwithstanding reduced federal funding. Meanwhile, while Head Start funds are allocated from the Federal Government based on the number of children living in poverty, NAP funds are provided through a block grant that is capped. The former, therefore, should change by population, while the latter should only grow with inflation, regardless of population changes.

5.1.4 Special Revenue Funds

Commonwealth agency Special Revenue Fund (SRF) revenues: The Commonwealth collects a significant portion of its revenues through Special Revenue Funds, which are funded from, among other sources, tax revenues transferred by statutes, fees and charges for services by agencies, dividends from public corporations and financing proceeds. Government tracking and reporting of these SRF revenues, associated expenses, and resulting surpluses or deficits has historically been incomplete and inconsistent. The baseline level of SRF revenues of

Commonwealth agencies (excluding IFCUs) has been updated in this 2020 Fiscal Plan. The 2020 Fiscal Plan does not further detail SRF by type (special state funds, own revenues and other revenues), as Commonwealth agencies (excluding IFCUs) do not report this level of detail. Future budget and Fiscal Plan processes will aim to further clarify Special Revenue Funds and apply controls to ensure transparency and accountability for these revenues. SRF revenues from fees and collections are also expected to be negatively affected by the COVID-19 pandemic, as agencies face decreased demand for services as a result of the lockdown.

Independently Forecasted Component Unit (IFCU) revenues: The Commonwealth contains thirteen Independently Forecasted Component Units, which range from public corporations (e.g., the State Insurance Fund Corporation) to public hospitals (e.g., the Cardio Center). These entities are mostly funded by Special Revenue Funds and may also receive General Fund appropriations. Through the FY2020 budget process and FY2019 actuals, the Oversight Board was able to gain more insight into the specific revenue streams for these entities to further refine the IFCU revenue projections. While most IFCU revenues are projected using GNP, given the unique nature of each IFCU, certain revenue streams are grown by other factors, such as inflation, population, or as governed by legislation. The 2020 Fiscal Plan factors in the significant expected negative impact of the COVID-19 pandemic on demand for government- and tourism-related services.

Municipal contributions to PayGo and ASES: The 2020 Fiscal Plan includes receipts from municipalities to cover retirement and healthcare expenses incurred by the Commonwealth on their behalf. Since the passage of Act 72-1993, ASES has received funding from municipalities for the administration and delivery of the Government Health Plan on their behalf. Similarly, since the passage of Act 106-2017, municipalities that participate in ERS are financially responsible for PayGo expenditures covered by the Commonwealth. The passage of Act 29-2019 disrupted this model and required the Government to fund municipalities' PayGo and Medicaid costs from the General Fund without receiving reimbursement from the municipalities. However, following legal proceedings initiated by the Oversight Board challenging the validity of Act 29-2019 under PROMESA, the Title III court ruled that Act 29-2019 violated PROMESA and nullified the law, thereby reinstating the municipalities' obligation to cover PayGo and healthcare payments for their employees. This ruling's consequences enabled the Commonwealth to seek reimbursement for prior payments made under Act 29-2019 and empowered the Commonwealth to act if these contributions are not received (e.g., to withhold payments for utilities, appropriations). The effective date of the court's ruling was delayed to May 7, 2020 so as to allow for the parties to discuss potential solutions to the financial challenges faced by municipalities, particularly in light of the COVID-19 pandemic. Accordingly, the 2020 Fiscal Plan assumes that municipalities fund their respective contributions for PayGo and healthcare expenditures going forward. In calculating municipalities' healthcare expenditures, however, the 2020 Fiscal Plan does take into account the incremental federal funding support in FY2021 and FY2022 made available through the 2020 Further Consolidated Appropriations Act. Given that this funding stream expires in FY2022, the 2020 Fiscal Plan assumes that contributions from municipalities thereafter will return to previous levels, but the Oversight Board would consider utilizing a similar approach in future years should additional federal funding again be provided.

Public Corporation PayGo receipts: The 2020 Fiscal Plan includes receipts from public corporations that participate in ERS to cover PayGo expenditures covered by the Commonwealth. The Commonwealth shall be reimbursed for these payments and will act if these contributions are not received (e.g., will withhold payments for utilities).

FAM: The Municipal Administration Fund (FAM) collects 0.5% of the SUT which is distributed into three funds: (1) 0.2% to the Municipal Development Fund; (2) 0.2% to the Municipal Redemption Fund; and (3) 0.1% to the Municipal Improvement Fund (referred to as the FMM). Pursuant to Section 4050.09 of Act 1-2011, the FMM are to be distributed through annual legislation and appropriated for select capital works and improvement

projects for the municipalities (e.g., public housing, schools). The legislature passes resolutions each year to allocate the FMM. These resolutions must be consistent with the 2020 Fiscal Plan and the applicable special revenue funds included in the Certified Budget.

5.1.5 Gross-up for tax credits

Gross-up of revenues to reflect potential revenues without payment of tax incentives: In addition to offering preferential tax rates, tax exemptions, tax abatements, and cash grants, the Government of Puerto Rico incurs hundreds of millions of dollars in tax credits to corporations and individuals each year. Some of these tax credits function as entitlement programs: any business that meets the requirements set forth in law is entitled to the benefit. Other tax credits give government officials considerable discretion on which projects will receive incentives. Many of these tax credits are intended to pursue certain policy goals such as stimulating employment, stimulating economic activity and economic development, encouraging investment, and protecting local industries. Unlike traditional expenditures, however, tax credits are not incurred in a transparent fashion, and, with only a few exceptions, are currently uncapped by any aggregate amount of benefits conveyed. The issuance of tax credits also tends to be done in an ad hoc manner, with unclear economic justification for the costs incurred and without monitoring of the goals described above (i.e., how many jobs in any particular year were created). This leads to an unpredictable, and potentially costly, foregone revenue stream each year.

Uncapped and unpredictable issuance of tax expenditures can have a materially negative fiscal impact. Several states have faced challenges with unexpected levels of expense from tax expenditures, such as Michigan (the Michigan Economic Growth Authority tax credits), Louisiana (tax credit for horizontal natural gas drilling), and New York ("brownfields" tax credits). The examples from these states are not uncommon and they reinforce the uncertainty and risk associated with the establishment of tax credits.

Policy makers in Puerto Rico must understand both the budget implications of current and proposed tax expenditures and be able to manage the size of tax incentives by setting limits on their annual cost and eliminating tax credits with negative returns. The issuance of reliable cost estimates, including a detailed analysis of the budget implications from each tax incentive and annual cost controls will help Puerto Rico avoid unexpected negative outcomes. Otherwise, the Government will remain powerless to manage the cost of these incentives and keep the incentives from growing uncontrollably.

Recognizing the importance of this question to the fiscal sustainability of Puerto Rico, the 2020 Fiscal Plan includes a forecast of gross revenues inclusive of the value of tax credits, along with their associated expenditures. The 2020 Fiscal Plan includes a forecast of gross revenues based on the historical level of certain tax credits claimed on income tax filings for individual filers, regular corporation filers, and incentive tax filers, as provided by Hacienda. As shown in *Exhibit 17*, over eight tax years (2010-2017), tax credits claimed across all tax filers averaged \$247 million annually. The Oversight Board requires all reporting going forward to include monthly and quarterly reports as to the gross revenues, tax credits claimed, and the net revenues received for the period of the report.

EXHIBIT 17: TAX CREDITS BY YEAR

Projection (\$M)	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Regular Corporations	94	47	87	84	76	65	59	32
Incentive Corporations	135	147	133	158	116	78	70	56
Individuals	59	38	90	69	65	66	61	88
Total Tax Credits Claimed	288	231	309	310	258	209	190	176
8-Year Average								
Aud 161 C Hanne 1824								

The Government should adopt a transparent limit to the amount of tax credits issued and claimed at an amount below \$247 million by, for example, capping the notional amount, restricting the number of companies and individuals that can claim credits annually, including sunset provisions, or inserting time bound clauses upon which each tax credit will expire. This is similar to the approach that other states have taken to limit the use or issuance of tax expenditures, including Arizona, California, Florida, Illinois, Massachusetts, Minnesota, New York, Ohio, and Pennsylvania. This limit is separate and incremental to the cash grants that corporations and individuals also receive, which will be captured in Certified Budgets going forward. Future Fiscal Plans must also be expanded to include limitations on foregone revenues due to preferential tax rates and exemptions, including municipal exemptions.

These forecasts must be maintained and updated by leveraging the work that Hacienda has undertaken to produce and maintain a more comprehensive measurement of tax expenditures over time through the annual Tax Expenditures Report. As discussed in more detail in Section 16.3.1, the publication of the initial Tax Expenditures Report in September 2019 provided, for the first time, better visibility into the full scope of tax expenditures being offered, together with a description and approximate cost of each expenditure. To continue building on this positive first step, the Government must provide an annual update to this report. The Government has also taken initial steps to provide transparency around, and control these expenditures through its proposed reforms to the Incentives Code. Only by explicitly appropriating money for incentives in the Certified Budget, and by setting a limit on the amount that can be spent each year, will tax incentives start to function more like regular spending programs, with the Government retaining control over the cost, and less like openended commitments, and enable public debate about the value of this type of spending in light of the various needs on the Island.

5.1.6 Gross-up for COFIM receipts

COFIM is the public corporation that collects the 1% Municipal Sales and Use Tax (SUT) established by law for certain municipalities. The 2020 Fiscal Plan includes projections of this 1% revenue stream, along with exactly offsetting expenses. COFIM is not an entity that receives appropriations from the General Fund, but rather relies solely on municipal SUT.

5.2 Baseline expenditure forecast

The trend of baseline expenditures, before measures and structural reforms, is summarized in *Exhibit 18.*

Key baseline expenditure drivers (pre-measures), 🔄 Payroll (non-federally 2.949 2.960 3.041 3.076 3.009 Direct operating expenditures (non-1.597 1711 1,723 1.745 1.773 1.794 redetally (unded) 1,004 1,218 1,228 1,123 1.123 Commonwealth Medicard 2.165 2 259 2,359 expenditures 287 Pension expendinges 2.784 2332 2314 2,311 2,309 7.300 Other 2,241 2,244 2.393 2 126 IFCU & CW SRE 2,465 2,480 2,498 7,503 6.706 6.646 Federally funded 5.339 4,871 4.938 4,007 19.426 20,017 19.900 20,107 20,336 FY20 **FY21** FY22 0723 **TY24 FY25** 4 Includes only General First orderating expenses. Prevalle, consumed Facel Med. richaged INT vips TVF.
2 Includes appropriation for TXX UPF. and municipal expenses. Services and municipal expenses of the prevalence of the preva

EXHIBIT 18: MAJOR EXPENDITURE CATEGORIES PRE-MEASURES

General fund payroll and non-personnel operating expenditures 5.2.1

Payroll expenditures: Despite progress made through the FY2021 budget process, consistent granular payroll data continues to be a challenge for the Government. FY2018 payroll numbers reflect actual expenditures where available and the Certified Budget in cases where actual data was not available (adjusted to reflect reapportionments among agencies). FY2019 was assumed to be equal to FY2018 given the Fiscal Plan Compliance Act, which enacted a payroll freeze except for certain agency-specific adjustments. Beginning in FY2020, base payroll has been assumed to grow by Puerto Rico inflation. Any reduction to baseline payroll expenditure projections from attrition, absenteeism, or workforce reductions will be captured through fiscal measures.

Non-personnel operating expenditures: Non-personnel operating expenditures in FY2019 were also assumed to be equal to FY2018 budgeted levels. Thereafter, non-personnel operating expenditures are assumed to grow by Puerto Rico inflation, with select adjustments as necessary (e.g., for reapportionments).

Special Revenue Funds 5.2.2

Commonwealth agency Special Revenue Fund (SRF) operational expenditures: The Commonwealth funds a significant portion of its expenses with Special Revenue Funds and previously did not report on these expenses transparently in a consistent manner. Given that SRF revenues and expenditures are not part of the General Fund for budgeting purposes, they are not included in the General Fund budget resolutions approved by the Legislature. However, the Oversight Board has certified SRF expenditures starting with the FY2019 budget process, with the objective of applying controls and reporting requirements to ensure transparency and accountability for these revenues and expenditures. With data made available by the Commonwealth, the baseline level of SRF expenses of Commonwealth agencies (excluding IFCUs) has been updated. Given the mandate of the Office of the CFO to

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place controls on SRF expenditures, expenses are forecasted to be equal to the estimated revenues in each year.

Independently Forecasted Component Unit (IFCU) operational expenditures: Most IFCU payroll and non-payroll expenses grow by inflation, with exceptions for certain expense categories (e.g., healthcare costs grow with medical inflation, variable costs that grow in line with revenues).

The baseline expenditures include municipality and public corporation PayGo, COFIM, and FAM expenditures, including all the conditions outlined in Section 5.1.4.

5.2.3 Other federal funding

Most federal funds received by the Commonwealth are passed through to residents directly in the form of social benefits (e.g., TANF, WIC), but federal funds are also used to cover operating expenditures in many agencies. Expenditures related to pass-through federal funds are set equal to the associated revenue stream. Baseline expenditures related to operating expenditures are set based on the FY2018 federal funds budget reported by the Government and grow with inflation (and in some cases population). In the case of Title I, revenues will grow with growth in total federal funding - presumed to track US inflation - but decline with decreasing enrollment, which is the most salient determinant of Puerto Rico's annual allocation. At the same time, the 2020 Fiscal Plan assumes fixed costs associated with providing these services may not decline at the same rate (given historical Commonwealth behavior of maintaining infrastructure such as schools and program staff despite population decline).

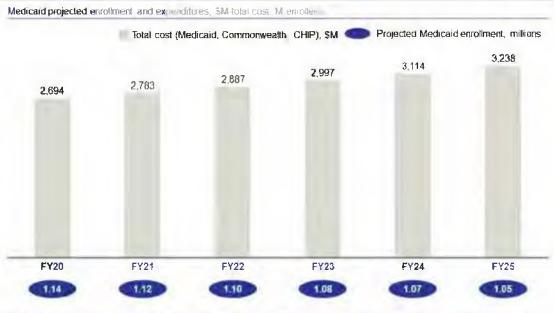
5.2.4 Medicaid expenditures

Medicaid costs are projected to reach nearly \$3.4 billion annually by FY2025. These costs are primarily driven by the weighted-average cost per member per month (PMPM) multiplied by the estimated number of people enrolled in the Medicaid (federal and Commonwealth-qualified), CHIP, and Platino dual-eligible programs. Projections also include other direct health expenditures (e.g., Hepatitis C, HIV, and pulmonary programs) that do not flow through managed care. These costs are exclusive of non-medical administrative costs to ASES and the Department of Health.

PMPM costs are projected to grow at 4.5% in FY2020, followed by an increase to an annual growth rate of 5.5% in FY2022, as a result of a longer recovery from depressed utilization caused by Hurricane Maria and the impact of COVID-19. In the long term, costs increase according to an age-mix-adjusted PMPM growth rate, which reflects a shift to a younger enrollment population (see Section 6.1).

Enrollment rates are primarily tied to overall population decline. The large drop-off in enrollment between FY2018 and FY2020 mainly reflects the end to the auto re-enrollment period that was put in place after Hurricane Maria, a period during which many enrollees either left the Island or ceased to qualify for coverage under current thresholds. The baseline projects a return to pre-hurricane rates of enrollment in FY2020, as in the 2019 Fiscal Plan. Additional changes in enrollment may be driven by the COVID-19 pandemic or other unexpected events.

EXHIBIT 19: PROJECTIONS FOR MEDICAID AND CHIP BASELINE COST AND ENROLLMENT (EXCLUDING PLATINO)



The Control Medicals (DMP, Commonwealth entire described by the Described on the second of the Commonwealth entire of the Commonwealth Superior and Referency)

Other Commonwealth Medicaid expenditures, which include, HIV/PDP, Air Ambulance, MC21 administrative fee, Super Utilizers, and Pulmonary, among others, are projected to grow at the rate of Puerto Rico healthcare inflation. Separate from those costs is the Health Insurance Tax (HIT), calculated each year by the Federal Government and estimated here to be 1.80% of the prior year's total premiums.²⁷ The Further Consolidated Appropriations Act, 2020 repealed the HIT requirement. Thus, the 2020 Fiscal Plan only reflects the estimated HIT fee anticipated to be required to be paid in FY2021 on FY2020 premium expenditures. Thereafter, the HIT fee is eliminated from projections.

Platino dual-eligible program expenditures were estimated using a consistent \$10 PMPM over FY2019-FY2023 representing payment for wrap-around services supplementing main Medicare coverage (from FY2024 onwards, this cost grows by the PMPM growth rate). Enrollment is projected to be affected similarly to Medicaid enrollment. Platino costs are expected to total nearly \$30 million in FY2020, decline slightly to \$29 million by FY2023, and then grow again.

5.2.5 Commonwealth pension expenditures

Pension costs: Projections rely on demographic and actuarial estimations for Employees' Retirement System (ERS), Teachers' Retirement System (TRS), and Judiciary Retirement System (JRS) populations and benefit obligations. From FY2020-FY2025, costs are projected to grow slowly but remain approximately \$2.3 billion per year. Since FY2018, pension benefits for all plans have been paid on a pay-as-you-go basis.

²⁷ See Sec 4003 of FOURTH CONTINUING APPROPRIATIONS FOR FISCAL YEAR 2018 at https://www.congress.gov/115/plaws/publ120/PLAW-115publ120.pdf. Based on actuarial estimates provided by ASES.

5.2.6 Appropriations

Municipalities: Baseline municipal appropriations are projected to remain constant at ~\$220 million, which represents the FY2018 appropriation level exclusive of a \$78 million one-time allotment to municipalities made in the aftermath of Hurricanes Irma and Maria.

University of Puerto Rico (UPR): The UPR appropriation baseline is \$717 million in FY2019 and remains ~\$717 million from FY2020-FY2023.

Highways and Transportation Authority (HTA): The Commonwealth provides HTA with an annual appropriation for capital expenditures and other costs. The 2020 Fiscal Plan provides that the HTA appropriation will be variable and set so as to cover HTA's forecasted annual deficits (after operating expenses and capital expenditures), as well as fund an "emergency reserve" account for the agency. The target size of the emergency reserve is initially set at ~\$250 million, in-line with best practices in other US jurisdictions, and will be adjusted each year in order to keep pace with inflation. As a result, the 2020 Fiscal Plan includes an average annual appropriation of ~\\$219 million over FY2021-FY2023, with ~\\$51 million per year funding OpEx deficits, ~\$123 million per year funding CapEx deficits, and ~\$45 million per year funding the "emergency reserve." Thereafter, the annual appropriation is forecasted to decline as HTA operating surpluses are available to fund capital account deficits. Over FY2024-FY2049, the 2020 Fiscal Plan includes an average annual appropriation of ~\$59 million, with ~\$54 million per year funding CapEx deficits and ~\$5 million per year funding the "emergency reserve." The 2020 Fiscal Plan also encourages HTA to prioritize and accelerate project delivery, focusing on the projects of utmost strategic importance to the residents of Puerto Rico.

5.2.7 Other operating & capital expenditures

Utilities: The 2020 Fiscal Plan uses the estimated billings from PREPA and PRASA on an agency level, which are then projected to grow over the period of FY2021-FY2030 according to forecasted utility rates (and then according to inflation thereafter).

Insurance (PRIMAS): The Commonwealth bears costs related to insurance premiums (e.g., property insurance, liability insurance). Government reporting on these costs has not been transparent or consistent over time (e.g., not all agencies report these costs independently of other operating expenses, reporting is not consolidated across General Fund and Special Revenue Funds). The Government reports that insurance costs have increased from FY2018 to FY2020 due to Hurricanes Maria and Irma. Given the potential risk of future hurricanes, the baseline expenses related to insurance have been increased, but the Government must improve reporting on these expenses going forward so that they can be managed appropriately.

Capital expenditures: Centrally-funded General Fund maintenance and capital expenditures of the Commonwealth (excluding PREPA, PRASA, HTA self-funded capital expenditures and one-time transfers) are expected to grow by inflation from a baseline of ~\$400 million in FY2018. In FY2021, ~\$59 million of the baseline expenses will be appropriated to HTA (as part of the total appropriations), with the remaining ~\$308 million for use by the Commonwealth. HTA's capital expenditure funds will be used to support reconstruction, maintenance, traffic reduction, completion of the strategic network, and P3-related expenditures. Other General Fund capital expenditures will be allocated to priority projects. The 2020 Fiscal Plan includes annual Special Revenue Fund capital expenditures of \$50 million.

5.2.8 Reconstruction and restructuring related expenditures

Cost-share for disaster relief funding: Federal funds for FEMA's public assistance and hazard mitigation programs typically require a local match from the entity receiving them

(anywhere from 10-25% of funds). In the case of Puerto Rico, the 2020 Fiscal Plan projects that the Commonwealth will need to cover an estimated ~10% of federal public assistance funds, amounting to \$3.5 billion from FY2018-FY2032. The instrumentalities will shoulder a further \$1.2 billion in total cost-match expenditures during the same period. A portion of the Commonwealth and instrumentalities' cost-match expenditures are projected to be covered by CDBG funds from FY2020 to FY2032, which amounts to \$2.3 billion. Meanwhile, the 2020 Fiscal Plan maintains \$600 million (from FY2020 to FY2032) in reserve funds in case less CDBG funding is available than is currently projected. If these funds are unspent, they would accumulate and be utilized as part of an emergency reserve fund going forward.

Restructuring-related costs: Commonwealth restructuring-related expenditures are projected at \$619 million for the period FY2020 to FY2024, and are comprised of all professional fees, including those of the Unsecured Creditors' Committee, the Retiree Committee, the Government (mostly AAFAF), and the Oversight Board. The estimate for professional fees in the 2019 Fiscal Plan was developed, in conjunction with the Government, by analyzing FY2018 and FY2019 run-rate billings based on available information and soliciting input from certain professionals. Fees were benchmarked versus comparable restructuring situations that yield an average professional-fee-to-funded-debt ratio of 2.08% relative to 1.68% projected for the Commonwealth (Exhibit 20). In total, for the period from FY2018 to FY2024, the restructuring-related expenditures projection in the 2020 Fiscal Plan continues to be ~\$1.1 billion (without change from the 2019 Fiscal Plan), however, uncertainty stemming from the series of recent natural disasters and ongoing COVID-19 pandemic have drawn out the restructuring process longer than anticipated. Separately, the Oversight Board's operating costs will remain at \$58 million per year from FY2020 to FY2026 (as opposed to \$75 million per year in the 2019 Fiscal Plan).

EXHIBIT 20: PROJECTED PROFESSIONAL FEES RELATIVE TO OTHER MAJOR RESTRUCTURINGS

	Date filed	Outstanding debt,	Total fees and expenses 1	Fees to funded debt		
y of Detroit, Michigan	Jul. 2013	6,400,000,0001	177,910,000	28	T	
edenual Capits I, LLC	May. 2012	15.000,000,000	409.321.308	2 7		
nine Oil & Gas Corp.	Jul 2015	2,800,000,000	78,553,223	2.6		
esars Entertainment Operating apany	Jan. 2015	18,000,000,000	258,278,005	1.4	Summary Statistics	
aman Brothers Holdings Inc.	Sep. 2008	613,000,000,000	956,957 469	0.2	Avg Max	2 089 3 569
ondell Chemical Company	Jan. 2009	22 000 000,000	205.932.292	0 9	Min	0 169
erican Airlines	Nov. 2011	11,000,000,000	391,637.858	3.6	Med	2.335
shington Mutual, Inc	Sep. 2008	8 000 000.000	271,085.213	34		
son Mission Energy	Dec. 2012	5.000,000,000	96,244.628	1.9		
ergy Future Holdings Corp.	Apr. 2014	40 000 000 000	450,110,233	11		
erto Rico	2017	64,000,000,900	1,075 000 000	1.7		
•	2017	64,000,000,000	1,075 000 000	1.7		

Emergency reserve: The Commonwealth must build up an emergency reserve of \$1.3 billion, or ~2.0% of FY2018 GNP, by reserving \$130 million per year for 10 years, which started in FY2019. The methodology supporting this reserve is informed by guidance provided

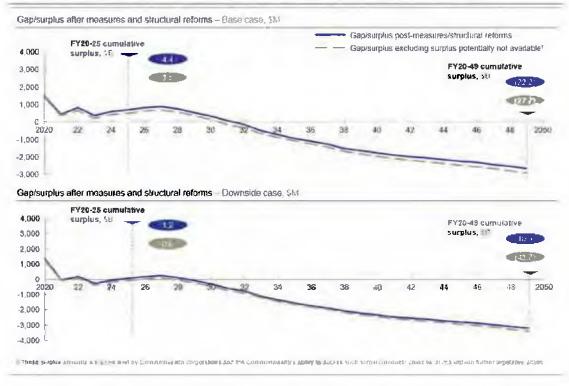
to other Caribbean islands by the International Monetary Fund in defining an adequate emergency reserve (2-4% of GNP, accumulated at 0.5% per year).²⁸ Restrictions on the use of this fund must ensure that it is a true emergency reserve.

For each of the gross-up revenue items included in Section 5.1.5 and Section 5.1.6, an equivalent expenditure is included in the baseline expense forecast.

5.3 Surplus potentially not available for Commonwealth

The 2020 Fiscal Plan financial projections show the surplus generated by all entities covered by the Commonwealth Fiscal Plan. However, some of the surplus is generated by Commonwealth public corporations, and the Commonwealth's ability to access such surplus amounts could be problematical without further legislative action. In particular, the surplus generated by the State Insurance Fund Corporation (SIFC) and the Cardiovascular Center Corporation of Puerto Rico and the Caribbean may be inaccessible. As such, the 2020 Fiscal Plan also represents what the surplus would be if these funds were inaccessible (*Exhibit 21*).

EXHIBIT 21: SURPLUS POTENTIALLY NOT AVAILABLE FOR COMMONWEALTH



Chapter 6. Long-term projections and Debt Sustainability Analysis (DSA)

While the 2020 Fiscal Plan emphasizes actions to be taken in the period from FY2020-FY2025, the Oversight Board's ultimate goal is to put Puerto Rico on a path towards long-term fiscal balance. However, based on current projections, this long-term fiscal balance is not

²⁸ IMF Bahamas Article IV report published March 22, 2018

achieved due to the impacts of COVID-19 and the scale of investment required to combat the effects of the pandemic, as well as the lack of progress to date on structural reform implementation. Nevertheless, long-term projections remain an important component in evaluating the 2020 Fiscal Plan's implementation and in the resulting Debt Sustainability Analysis (DSA). The outcome of the DSA pertains to traditional debt only, and not to other types such as contingent or no-default debt. Given large swings in debt sustainability shown in the sensitivity analysis, the amount of sustainable debt is contingent on several factors. Finally, the debt sustainability analysis should be adjusted going forward to account for new facts when available and errors when proven.

The 2020 Fiscal Plan is a 30-year plan, as any restructuring of the Commonwealth's legacy obligations will not extend beyond 30 years. In addition, longer-term projections involve even further forecasting risk.

6.1 Long-term macroeconomic, revenue, and expenditure projections

While GNP trends are volatile in the short term due to COVID-19, as well as the impact of the hurricanes and earthquakes, after FY2025 real GNP growth is negative and gradually declines as disaster relief funding drops off considerably and structural reform growth rates are muted. Nominal growth is 1.0-2.0%. The population is estimated to steadily decline at an average rate of ~1.1% annually, largely due to declining fertility rates. Inflation settles at a long-term runrate of 1.4-1.9% as it is expected to gradually converge to mainland forecasts.

Most revenues are projected to grow with nominal GNP in the long term.²⁹ This includes SUT, corporate income tax, personal income tax, non-resident withholding not paid by Act 154 entities and most General Fund revenues. Exceptions include:

- Alcoholic beverages and cigarette-related tax revenues, which are expected to grow by inflation and population. This assumption is supported both by relatively constant alcohol consumption in growing economies along with the long-term decline in cigarette consumption both in Puerto Rico and the US mainland.
- Rum excise on off-shore shipments, is expected to grow by US mainland population and is partially driven by the statutory waterfall by which rum excise taxes are paid into the General Fund.
- Non-resident withholding (NRW) and Act 154 revenues, which will face declines due to US tax reform, supply chain diversification, and patent expirations. This decline had begun during FY2020, with incremental declines forecasted in each year through FY2023 (41.7% cumulative decline versus FY2018 baseline). No further declines are anticipated through FY2027; however, additional losses of Act 154 revenue is expected in FY2028-FY2031, such that FY2031 revenues are projected to be 64.4% below baseline. This leads to a steady state of \$859 million in annual Act 154 revenues beginning in FY2031. NRW payments made by Act 154 payers are projected to follow a similar trajectory, though with a shallower decline. After reaching steady state in FY2031, NRW payments are projected at \$267 million (42.7% below baseline). NRW revenues not related to Act 154 payers continue to grow with nominal GNP.
- Independently Forecasted Component Units (IFCU) revenues: IFCU revenues are projected on a line item basis and grow by the same values as in the short-term projections (largely by nominal GNP, with exceptions for those related to healthcare, population, or other factors). The only IFCU with a different short-term and long-term

²⁹ This methodology is consistent with general IMF forecasting approaches and is intended to capture the overall change in consumption, investment and production within the economy

revenue projection is the State Insurance Fund Corporation, for which the Fiscal Plan projects an increase in revenues related to disaster recovery for FY2020-FY2032, reflecting the short-term increase in construction sector activity.

Federal fund revenues grow based on historical and statutory appropriations. Medicaid receives the most significant federal funding. The standard cap for Medicaid matching funds grows by the medical services component of CPI-U, CHIP funding grows proportional to growth of premiums and enrollment. However, several significant sources of federal funding for Medicaid (e.g., ACA, BBA, Further Consolidated Appropriations Act, Families First) are only legislated through the first quarter of FY2022. This creates a "funding cliff" whereby the share of Medicaid funding borne by the Commonwealth increases from \$633 million in FY2021 to \$2,447 million in FY2023. While additional federal funding for Medicaid may be provided in the future, the 2020 Fiscal Plan model only reflects currently-legislated federal funding amounts. Additional revenue for the Medicaid program comes from municipal intragovernmental transfers, which remain constant, and prescription drug rebates, which grow proportionally to healthcare costs and population.

Just as most revenues grow by GNP, most **expenditures grow by standard inflation** after FY2025. Exceptions include:

- Medicaid premiums grow at a faster pace than standard inflation and are instead grown by a PMPM growth rate and population change. On average, costs per demographic group will increase consistent with historical PR healthcare costs, and in line with external data. However, the latest projections suggest the magnitude of this trend will not be as significant as reflected previous Fiscal Plans. From FY2026-FY2049, the age-mix-adjusted PMPM growth rate is expected to decline from 5.30% in FY2026 to 4.75% in FY2049. This projection is driven by two factors. First, current demographic projections suggest that the population is not aging as fast as previously projected, which causes declines in overall healthcare utilization. Second, general cost efficiency spillovers from the US mainland are expected to exert downward pressure on PMPMs. In the near-term, PMPM growth is expected to be muted in FY2020 due to lower utilization driven by the COVID-19 pandemic. Social distancing and stay-at-home guidance have lowered utilization of the healthcare system. Between FY2020 and FY2022, the PMPM growth rate is expected to increase from 4.5% to 5.5% as utilization recovers from both the COVID-19 pandemic and persistent impact from Hurricane Maria. Non-premium costs, such as administrative and payroll costs grow by standard inflation in the long-term.
- Capital expenditures are anticipated to rise to 1.9% of GNP (in line with the mainland average) by FY2038, increasing the annual Commonwealth average to ~\$650 million over FY2038-FY2049, as Puerto Rico must sustain a higher level of maintenance and rely on its own funding for capital investments (rather than disaster relief funding). Cost match for disaster-related federal funding increases to an average of ~\$116 million from FY2026 to FY2032, as the Commonwealth pays the entirety of the cost match during that period. The Commonwealth is not responsible for the portion of funds allocated to instrumentalities (e.g., PREPA, PRASA, HTA).
- Independently Forecasted Component Units (IFCU) expenditures are forecasted on a line item basis. Most grow with standard Puerto Rico inflation with some exceptions, such as healthcare- or claims-related expenditures. Over the long-term, the expenses of healthcare-related IFCUs (e.g., ASEM, Cardio) are projected to grow faster than revenues, creating a deficit. This Fiscal Plan assumes deficits related to healthcare will be funded by the Commonwealth.

Fiscal measures grow by their relevant macroeconomic indicator (e.g., revenues by nominal Puerto Rican GNP, expenditures by Puerto Rican inflation, healthcare measure by health inflation and population).

A downside scenario based on COVID-19 has been included in this 2020 Fiscal Plan given that the pandemic has created significant uncertainty in near-term financial projections. As such, a downside scenario is presented to showcase the potential trajectory of the Island in the case where the spread of the virus is greater and/or the economic impact is more severe than anticipated in the base case. The downside scenario fundamentally alters the Island's economic condition and therefore impacts long-term projections.

The long-term macroeconomic projections for both the base case and downside case show trends as below (Exhibit 22, Exhibit 23, Exhibit 24, and Exhibit 25).

EXHIBIT 22: 30-YEAR FINANCIAL PROJECTIONS

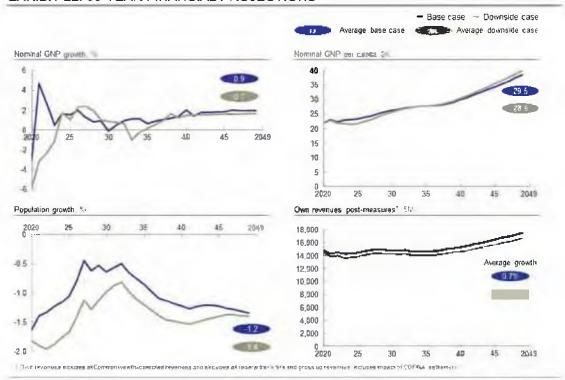


EXHIBIT 23: LONG-TERM FISCAL PLAN PROJECTIONS POST-MEASURES AND STRUCTURAL REFORMS (BASE CASE)

Projection	(00005	FY2000	FY2035	FY2040	FY2045	FY2049
Population, thousands	2,813	2,701	2,590	2,427	2,268	2,152
Population growth rate, %	(1 3%)	(0.8%)	(1.1%)	(1,4%)	(1.3%)	(1 3%)
Real GNP growth, %	(0.1%)	(0.5%)	(1.2%)	(0.4%)	(0.3%)	(0.2%)
Nominal GNP, ½≌	69,544	75,679	76.292	80,954	87,465	93,269
Nominal GNP per capita. \$	24,720	28,023	29,453	33.353	38.568	43,349
Nominal GNP per capita growth, %	2.4%	1.7%	1.3%	2.9%	2.9%	3.0%
Inflation, 🦠	1,2%	1.5%	1.5%	1,9%	1.9%	1.9%
Disaster funding, SM	5,843	3,874	-	*	12	-
Revenues ¹ , SH	19,724	20,654	20,941	22,192	23,970	25,589
Commonwealth revenues	14,604	15,119	14,944	15,652	16,796	17,847
Federaltransfers	5,120	5,535	5,997	6,540	7,175	7,742
Expenditures!, SM	(19 043)	(20,307)	(21,872)	(23 977)	(26,226)	(28,250)
Commonwealth-funded expenditures	(14,035)	(14,870)	(15,956)	(17,481)	(19,049)	(20,466)
Federally funded expenditures	(5.007)	(5 437)	(5 9 16)	(6,497)	(7,177)	(7,784)
Gap / surplus Srt	681	347	(931)	(1,785)	(2,256)	(2,651)
Contractual debl service payments ²	(1,697)	(1,904)	(1,653)	(1,049)	(163)	(50)
Net gap i surplos, SH	(1,016)	(1,557)	(2 584)	(2,B34)	(2,419)	(2,711)
Surplus potentially not available 'SM	172	220	152	176	219	256

EXHIBIT 24: LONG-TERM FISCAL PLAN PROJECTIONS POST-MEASURES AND STRUCTURAL REFORMS (DOWNSIDE CASE)

Financial projection defail post-measures and s	a dicale for the parties, is the	El Carron				
Projection	FY2025	Euchboa	FY2035	FY2040	FIG015	F17346
Population, thousand:	2,761	2,601	2.473	2,300	2,136	2,020
Population growth rate 3	(1,7%)	(1.0%)	(1.2%)	(1.5%)	(1.4%)	(1.4%)
Real GNP growth, %	(0.4%)	(0.6%)	(1.3%)	(0.4%)	(0.3%)	(0.2%)
Normal GNP 111	64,220	69,895	70,168	74,443	80,422	85,761
Nominal GNP per capita, 5	23,256	26,877	28,383	32 361	37,651	42,464
Nominal GNP per capita growth, %	2.8%	1.9%	1.4%	3.1%	3.0%	3.1%
inflation, 🧆	1.2%	1.5%	1,5%	1.9%	1.9%	1.9%
Disaster funding, \$M	5.843	3,874	~	-	1.5	-
Revenues!, \$55	18,923	19,740	19,955	21,125	22,803	24,339
Commonwealthrevenues	13.827	14,258	14.027	14,669	15,727	16,708
Federaltransfers	5.096	5,482	5,928	6,456	7,076	7,634
Expenditures ⁴ , St1	(18,879)	(20,040)	(21,525)	(23,493)	(25,635)	(27 569)
Commonwealth-funded expenditures	(13,884)	(14,631)	(15,646)	(17,042)	(18,513)	(19,846)
Federally-funded expenditures	(4,995)	(5 4 10)	(5,879)	(6,451)	(7,122)	(7,723)
Sap (surprus, St)	43	(300)	(1,571)	(2,368)	(2,832)	(3,230)
Contractual debt service payments ²	(1,697)	(1,904)	(1,653)	(1,049)	(163)	(50)
Net gap / surplus, \$4	(1,854)	(2,205)	(3,223)	(3,417)	(2,994)	(3,279)
Surplus potentially not available 3. SM	118	160	89	108	147	180

¹ Revelues and expension contractual debt obligators. Presented for flustrative purposes only and does not represent anti-opated future payments on restrictured debt. Includes GD. PBA. CCAD. PREA. PFC, ERS. PRIZO. The 2020 Fiscal Plan ideas not assume any predetermined outcome of ongoing flugation with respect to GD conds.

3 These surplus amounts are generated by Commonwealth corporations and the Commonwealth is ability to access such surplus amounts could be at risk without further legislative action.

¹ Revenues and expendifures excluding gross up adjustments.
2 Debt service based on prepition contractual debt obligations. Presented for Australian purposes only 8 does not represent anticipated future payments on restructured debt. Includes GO. PBA., CCDA, PREA., PPC, ERS, PRIDCO. The 2020 Facal Plan does not assume any predetermined outcome of ongoing Migotion with respect to GO bonds.
3 These surplus amounts are generated by Commonwealth corporations and the Commonwealth's abidity to access such surplus amounts could be disk without further legislative account.

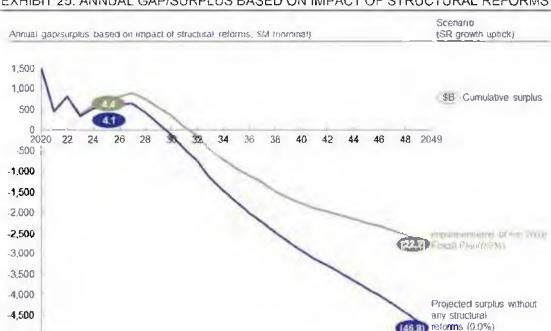


EXHIBIT 25: ANNUAL GAP/SURPLUS BASED ON IMPACT OF STRUCTURAL REFORMS

The 2020 Fiscal Plan shows minor short-term surpluses driven by significant federal relief as well as fiscal measures and structural reforms. Long-term deficits are driven by healthcare costs that outpace GNP growth, lack of robust structural reforms, phase out of disaster relief funding, and declining Act 154 revenues.

-5.000

While the 2020 Fiscal Plan projects deficits from FY2032 onward, the Government will be required to take additional measures that go beyond the five-year framework of this 2020 Fiscal Plan as the Puerto Rico Constitution requires the Government to operate within a framework of fiscal balance. Accordingly, what follows are a set of options that future governments can consider in order to obtain fiscal balance in the out-years. Some of these reforms — which would reduce deficits and therefore make funds available for a variety of potential uses, including investment in the people of Puerto Rico — have been proposed by the Oversight Board, but have not been adopted, and the Oversight Board cannot implement them on its own.

- Private sector labor reform, generating an additional 0.50% GNP growth over two years, by repealing Law 80, reducing paid leave, and eliminating the Christmas Bonus. Key reforms could require incentives, such as wage subsidies for low-income workers and training programs to address identifiable skills gaps. The reform is projected to increase the 30-year surplus by ~\$10 billion if implemented after 10 years (FY2030) and by ~\$3 billion if implemented within 20 years (FY2040).
- Ease of Doing Business reform, generating an additional 0.15% GNP growth, based on instituting Trading Across Borders reform to improve customs processes and congestion and repealing restrictive laws (e.g., Laws 21 and 75 dictating terms for terminating commercial supplier relationships). The 30-year surplus is projected to increase by ~\$3 billion if implemented after 10 years (FY2030) and by ~\$850 million if implementation lags by 20 years (FY2040).
- Overhaul of the tax system of Puerto Rico to stimulate growth, requiring short-term investment (lower revenues in short-term) for long-term growth benefits up to 0.5% spread over five years. The reform is projected to increase the 30-year surplus by ~\$9

billion if implemented after 10 years (FY2030) and by ~\$2 billion if implementation lags by 20 years (FY2040).

- Imposing a cap on total healthcare expenditure growth at 2% above standard inflation is projected to result in savings of ~\$14 billion by FY2049 if implemented in FY2030 and ~\$3 billion if implemented in FY2040.
- Securing additional permanent federal funding for Medicaid of ~\$1 billion per year (and growing with inflation) is projected to increase the 30-year surplus by ~\$27 billion if begun in FY2030 and ~\$11 billion if begun in FY2040.

Risks to the long-term projections in the 2020 Fiscal Plan. While the 2020 Fiscal Plan projects that ~\$8 billion surplus will be generated through FY2020-2031, there are several variables that have a material impact on the long-term financial projections in the 2020 Fiscal Plan. The impacts of COVID-19 remain highly uncertain at this stage and could prove to be longer-lasting and greater than anticipated. Moreover, revenues could be compromised through lower growth generated by delayed or not implemented structural reforms, lower than expected federal funding, and/or less efficient spending on capital than projected. Both revenues and expenditures could be impacted by demographic shifts not yet seen on the Island, and in the areas of government expenditures:

- Lack of implementation of healthcare reform measures could affect the long-term projections of the 2020 Fiscal Plan. If healthcare reform measures are not implemented starting in FY2021, the surplus would decrease by \$14 billion.
- Implementation risk of agency efficiency measures also exists. For example, if only 50% of the projected run rate agency efficiency measures are achieved, the 30-year surplus would decrease by \$21 billion. Similarly, if only 75% of the projected run rate agency efficiency measures are achieved, the 30-year surplus would decrease by \$11 billion.

6.2 Debt Sustainability Analysis (DSA)

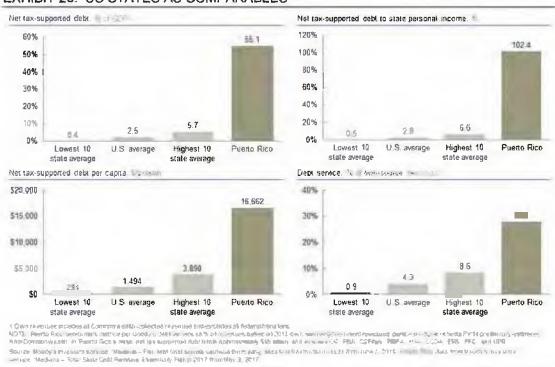
The DSA is intended to provide a framework for assessing the long-term capacity of the Government to pay debt service on its bonded debt. Debt levels post-restructuring need to be sustainable over the long-term and consistent with both a minimal risk of default on the restructured debt and a recovery of market access for future new money borrowings for ongoing infrastructure investment. The analysis begins with the 2020 Fiscal Plan and is then informed by the debt sustained by the most appropriate peer group against which to benchmark Puerto Rico. The DSA then applies rating agency metrics for that benchmark group to Puerto Rico to arrive at an assessment of what debt levels are sustainable in light of longterm projections and the peer metrics. Net tax-supported debt is defined as debt payable from statewide taxes and other general resources, net of obligations that are self-supporting from pledged sources other than state taxes or operating resources (such as utility or local government revenues). Prior to the enactment of PROMESA, Puerto Rico had approximately \$45 billion in tax-supported debt with a declining economy and no guarantee of sustained federal funding. Post-COFINA restructuring, Puerto Rico net tax supported debt outstanding was approximately \$41 billion, comprised of GO, PBA, COFINA, PRIFA, HTA, CCDA, ERS, Public Finance Corporation (PFC), and other intergovernmental loans. Net of the restructured COFINA debt, Puerto Rico's other net tax-supported debt outstanding totals approximately \$28 billion.

The 2020 Fiscal Plan's DSA has been fundamentally re-evaluated and adjusted to reflect accurately Puerto Rico's post-COVID-19 economic reality. The contours of the post-COVID-19 economy are uncertain but have already caused a significant global economic recession and could have both positive and negative effects on various industries vital to Puerto Rico's local

economy. Due to these unknown impacts, any economic projections at this time will necessarily be uncertain and imprecise, especially when it comes to reflecting Puerto Rico's debt capacity. Accordingly, the DSA in the 2020 Fiscal Plan has evolved since the 2019 Fiscal Plan's DSA.

US states as peer comparables: Like US states, Puerto Rico does not control its own currency, has no access to IMF restructuring support programs or similar international sovereign relief funding packages, and traditionally has been reliant on access to the same long-term municipal bond market used by the US states to finance their capital needs. Puerto Rico's bonds are also rated by the same rating agency analyst groups that assign ratings to US states, not by foreign sovereign bond rating analysts. For these and other reasons, Puerto Rico has more similarities to US states than to sovereign nations. By virtually any measure tracked by the rating agencies, Puerto Rico's existing debt levels are clear outliers relative to these US state peers (Exhibit 26).

EXHIBIT 26: US STATES AS COMPARABLES



While some observers note that Puerto Rico residents do not pay federal income taxes, they do pay Social Security and Medicare taxes, and the low per capita income levels would place most Puerto Ricans in a tax bracket where they would otherwise pay little or no federal income tax. Meanwhile, federal reimbursement levels provided to Puerto Rico for the largest Government spending programs (including Medicaid and transportation) are capped at levels well below the FMAP and federal highway reimbursement levels provided to comparably sized and wealthier states. Puerto Rico's residents pay graduated income taxes to Puerto Rico at brackets comparable to the federal income tax rates, thereby providing the funds needed to provide services to the Puerto Rico resident population, which is far poorer than the population of any US state. Yet Puerto Rico receives far less federal support.

Metrics for debt sustainability: Viewing US states as the most comparable group for benchmarking Puerto Rico, the DSA uses the debt ratio metrics in the June 3, 2019 Moody's Investors Service (Moody's) report "States - US Medians - Flat debt total signals cautious borrowing, despite infrastructure needs" and the "Fixed Costs" ratio metrics in Exhibit 19 of

the September 17, 2019 Moody's report "States - US Medians - Adjusted net pension liabilities decline; OPEB liabilities vary widely" to develop a range of levels for sustainable debt capacity, including Maximum Annual Debt Service (MADS) levels for Puerto Rico on its restructured existing debt. The key debt ratios for the ten lowest indebted states, the 25 lowest indebted states, the 25 highest indebted states, the ten highest indebted states, and the mean for all US states are shown below (Exhibit 27).

EXHIBIT 27: KEY DEBT RATIOS FOR US STATES

tet ter-supported debt "4 »!			Net tax supported debt to state personal income, '-			Not lax-supported debt per capita, 3			Debt Service. * (in the reserve) in investiges			Fixed Costs. 3-14 Company		
	Low 10	0.4		Low 10	0.5		Low 10	231		Low 10	0.9		Low 10	3.3
	1.ov 25	10		Law 25	1.1		Low 25	498		Low 25	2.1		Low 25	5.3
	Mean	2,5		Mean	28		Mean.	1,494		Mean	43		Mean	9.5
	Top 25	4.0		Top 25	4.6		Top 25	2 489		Top 25	6.4		Top 25	13.9
	Teg 19	5.7		Top 10	6.6		Top 10	3.890		Top 10	8.6		Top 10	19.8
1	Capnesticul	9.2	+	Науман	10 3	1	Connectious	6,803	1	Connecticut	13.5	1	Connecticut	29.7
2	Hawaii	8.7	2	Connecticut	9.4	2	Massachusetts	6,113	2	New Jersey	9.9	2	Throne	29.1
)	Massachusetts	7.6	3	Massachests	9.1	3	Hawali		3	Hawan	9.5	3	Hawaii	21.3
4	Maw Jersey	52	4	Delaware	6.5	4	New Jersey	4,154	4	Massachusells	9.4	4	New Jersey	26.4
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7	Kentucky	4.3	7	New York	5.0	7	(Ilipo(5	2.752	7	Kentucky	71	7	Maryland	
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9	New York	4 0	9	Kentucky	4.8	9	Maryland	2,343	9	New York	5.7	9	Perrosylvania	13.9
10	Rhode Island	4.0	10	Washington	4.8	10	Rhode Island	2,216	10	Delaware	5.6	10	Detay/are	13.1

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Exhibit 28 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt and fixed cost metrics of the average US state. The debt capacity ranges shown are based off the following five methodologies: (i) debt to ownsource revenues, (ii) debt per capita, (iii) debt to state personal income; (iv) debt to GDP; and (v) fixed costs to own-source revenues. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and debt service on any future new money capital borrowings Puerto Rico needs to maintain its public infrastructure. To the extent new and additional revenues are enacted in the future, including revenues designed to support future capital projects or generated by public-private partnership infrastructure investments, then those initiatives could generate additional debt capacity for Puerto Rico that is not reflected in the current 2020 Fiscal Plan projections. Consistent with the February 9, 2020 Commonwealth Plan Support Agreement, the debt service on Commonwealth taxsupported debt (excluding COFINA senior bonds) is limited to 20 years for the purposes of this analysis. The 5-year average capacity statistics represent the average par amount between the five methodologies of an implied 5.55% 20-year level debt service structure. Moody's defines "fixed costs" as the sum of a state's annual debt service and its annual budgetary pension and retiree healthcare (i.e., Other Post-Employment Benefits (OPEB)) expenditures. Given that Puerto Rico's public employee pension system is essentially zero percent funded and that as a consequence the Central Government will pay pension expenditures on a fully PayGo basis from budgeted revenues each year - the fixed costs ratio helps capture that burden in comparison to the level of fixed costs as a percentage of Own Source Revenues for US States.

EXHIBIT 28: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON AVERAGE US STATE (\$M)

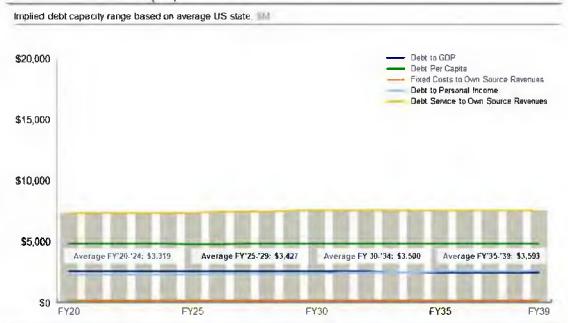
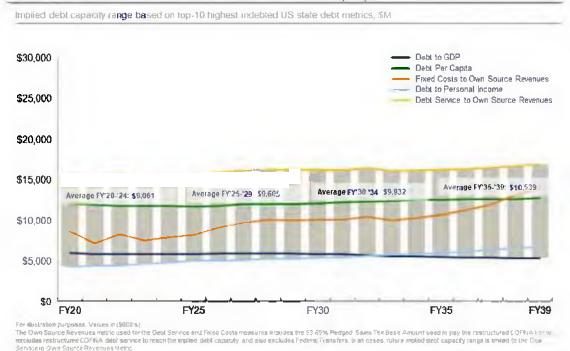


Exhibit 29 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the 10 highest indebted US states. The debt capacity ranges shown are based off the following five methodologies: (i) debt service to own source revenues, (ii) debt per capita, (iii) debt to state personal income, (iv) debt to GDP, and (v) fixed costs to own-source revenues. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and future debt issuance. The 5-year average capacity statistics represent the average amount between the five methodologies of an implied 5.55% 20-year level debt service structure

EXHIBIT 29: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON TOP-10 HIGHEST INDEBTED US STATE DEBT METRICS (\$M)



The illustrative implied levels of the Government's restructured debt in the previous chart are calculated by applying the Net Tax Supported Debt ratios of the "top ten" US states (in terms of debt load) to Puerto Rico's future projected GDP, population and Own-Source Revenues. Debt Service to Own Source Revenue and Fixed Costs to Own Source Revenues figures are derived assuming debt service of a long-term level debt service structure, with a 5.55% average coupon.

Exhibit 30 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the 25 highest indebted US states with the same five methodologies.

EXHIBIT 30: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON TOP-25 HIGHEST INDEBTED US STATE DEBT METRICS (\$M)

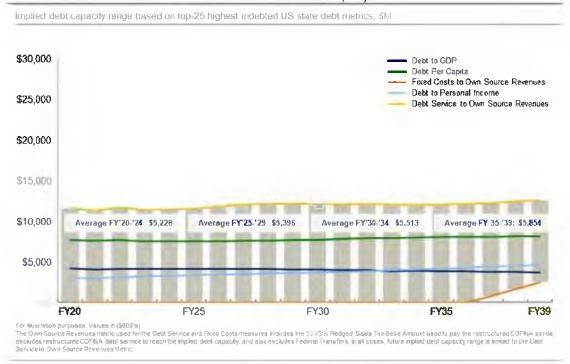
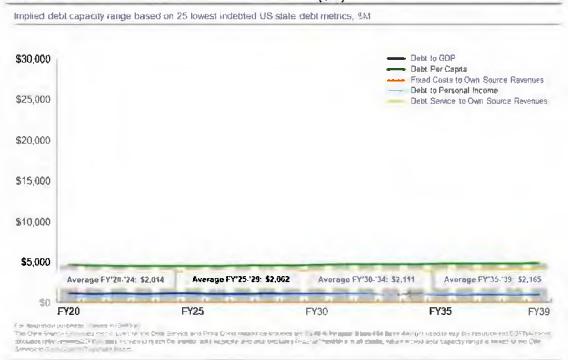


Exhibit 31 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the 25 lowest indebted US states with the same five methodologies.

EXHIBIT 31: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON 25 LOWEST INDEBTED US STATE DEBT METRICS (\$M)



Maximum annual debt service cap on restructured fixed payment debt: The implied debt capacity and expected growth in debt capacity must be sufficient to cover both the payments due on the restructured debt and all payments due on future new money borrowings. Accordingly, the aggregate debt service due on all fixed payment debt issued in the restructuring of the Government's existing tax-supported debt should be capped at a MADS level. The cap would be derived from the US state rating metrics, and specifically from what Moody's calls the "Debt Service Ratio." The Debt Service Ratio is the ratio of total payments due in a year on all existing net tax-supported debt over that state government's own-source revenues (i.e., excluding federal transfer payments) in that year.

The Moody's report indicates that the average Debt Service Ratio for the all US states is 4.3%. The Moody's report indicates that the average Debt Service Ratio for the top 10 most indebted states is 8.6%. The Moody's report indicates that the average Debt Service Ratio for the top 25 most indebted states is 6.4%. The Moody's report indicates that the average Debt Service Ratio for the 25 lowest indebted states is 2.1%. To the extent any of these Debt Service Ratios is used to set a MADS cap on the restructured debt and the Primary Surplus is below the MADS level, then the debt service due on fixed payment debt would need to be set at the lower of the amount available for debt service or the MADS limit.

With respect to the Moody's Fixed Costs Ratio, the September 2019 Moody's report indicates that the average Fixed Costs Ratio for all US States is 9.6%. The same report indicates that the average Fixed Costs Ratio for the 10 States with the highest Fixed Costs Ratios is 19.8%, the average Fixed Costs Ratio for the 25 States with the highest Fixed Costs Ratios is 13.9%, and the average Fixed Costs Ratio for the 25 States with the lowest Fixed Costs Ratios is 5.3%.

Debt sustainability analysis. Exhibit 32 below calculates implied debt capacity based on a range of interest rates and 2020 Fiscal Plan risk factors under an assumed illustrative 20-year term and level debt service. The risk factor is calculated by reducing the amount of projected cash flow available per year for debt service by a certain percentage. For example, a 20% risk factor case would use only 80% of the projected cash flow available to pay debt service on fixed payment debt.

EXHIBIT 32: IMPLIED DEBT CAPACITY BASED ON RANGE OF INTEREST RATES AND RISK FACTORS (\$M)

	Sensitivity Analysis Implied Debt Capacity at 20% contingency								
llustrative Cash Flow Available		\$200	\$400	\$600	\$800				
	4.0%	\$2,174	\$4,349	\$6,523	\$8,698				
Sensitivity Analysis: PV Rates %	5.0%	1,994	3,988	5,982	7,976				
	6.0%	1,835	3,670	5,506	7,341				
	Sensitivity Ar	nalysis. Implied I	Debt Capacity at :	5% PV Rate					
ltustrative Cash Flow Available		\$200	\$400	\$600	\$800				
	10 0%	\$2,243	\$4,486	\$6,730	\$8,973				
Sensitivity Analysis: % Contingency	20.0%	1,994	3,988	5.982	7,976				
, a warrangeries	30.0%	1,745	3,489	5,234	6,979				

Restoration of cost-effective market access: As Puerto Rico seeks to regain cost-effective capital markets access, rating analysts and investors will demand that the Government demonstrate improvement in all four core areas of creditworthiness identified by Moody's: (i) the economy, (ii) Government finances, (iii) governance and "fixed cost" debt service, and (iv) pension expenditures. The Government must adhere to structurally balanced budgets reflecting ongoing fiscal discipline and return to the timely publication of audited financial statements and related disclosure information. Together, these and other measures outlined in the 2020 Fiscal Plan can chart a path to restoring Puerto Rico's market access.

Part III. Investments to revitalize Puerto Rico

Despite the challenging economic climate ahead, the 2020 Fiscal Plan furthers the Oversight Board's multi-year strategic investment program to improve government services, increase competitiveness, and create the conditions for growth that can benefit all residents.

Over multiple Fiscal Plans the Oversight Board has called for investments in front-line services that residents depend on for health, safety, and economic opportunity. This has included major investments in healthcare, public safety, and education. The 2020 Fiscal Plan preserves investments included in prior Fiscal Plans and supplements them in priority areas such as broadband infrastructure, developing the technology-oriented workforce of Puerto Rico, and revitalizing the manufacturing sector.

With the onset of the COVID-19 pandemic and resulting economic damage, it is now more imperative than ever that the Government make longer-term investments in the Island's infrastructure and workforce to lay the groundwork for recovery, future innovation, and success in an increasingly competitive global economy.

In total, the 2020 Fiscal Plan proposes \$5.5 billion in investments over FY2020-FY2025. These investments can be categorized as follows.

Immediate response to COVID-19

As described in Section 4.2.3, the Oversight Board has worked closely with the Government to act decisively to mitigate the effects of the sudden economic shock caused by the COVID-19 pandemic. These initial FY2020 investments have included:

- Providing hazard pay for front-line workers (~\$213 million): Providing one-time bonuses to essential front-line workers (including public and private nurses and technicians, police, certain correctional staff, and professionals managing taxes and financial operations) so as to support them during this challenging time and reward them for their valiant efforts in combating the COVID-19 pandemic.
- Supporting direct payments to residents (\$160 million): Offering a \$500 one-time cash payment to 200,000 self-employed individuals and a \$1,500 one-time cash payment to 40,000 small businesses on the Island.
- Supplying essential supplies and equipment (\$55 million): Facilitating the purchase of critical medical and public safety supplies, as well as enabling urgent capital expenditure programs.
- Enabling distance learning in the public education system (~\$255 million): Purchasing tablets, software, and training services necessary to support distance learning for all PRDE students and teachers as part of the Emergency Measures Support Package issued in response to the COVID-19 emergency.
- Supporting municipalities (\$100 million): Providing funding to help municipalities weather the fiscal challenges posed by the COVID-19 pandemic.
- Ensuring municipalities have adequate liquidity (\$185 million): Authorizing liquidity support for municipalities facing delayed property tax collections as a result of COVID-19.³⁰

³⁰ The liquidity facility is considered a use of the Commonwealth balance sheet, not a Fiscal Plan expense.

■ Enabling research and development (\$2 million): Funding COVID-19 related research and development in UPR's Medical Sciences Department.

Investing in critical healthcare infrastructure

The Oversight Board further proposed to the Government to use remaining FY2020 funds to invest in healthcare infrastructure and services in the near-term. The Oversight Board has recommended several priority investment opportunities, but has not yet secured agreement from the Government. These investments would include:

- Capital improvements in public hospitals (~\$158 million): Addressing critical infrastructure gaps (e.g., the renovation of functionally-obsolete facilities, purchase of power generators) that are necessary to expand capacity and ensure facilities are equipped to meet Puerto Rico's healthcare needs. Facilities and hospitals included are the Department of Health, the University Pediatric Hospital, the Adult University Hospital, Hospital Universitario Ramon Ruiz Arnau, the Medical Services Administration including Centro Médico, the Mental Health and Drug Addiction Services Administration, the Comprehensive Cancer Center (in addition to the funds outlined in the previous section), UPR Medical Sciences Campus, and the Cardiovascular Center Corporation.
- Public hospital IT (~\$90 million): Instituting and expanding the use of Electronic Health Record programs and driving operational improvements through the use of digital hospital management tools. The Oversight Board recommends that \$70 million be invested in FY2020 and has included \$20 million for investment in FY2021.
- Telehealth infrastructure (~\$5 million): Expanding access to care through development of a telehealth platform and establishment of access points in underserved areas.
- Supporting opioid treatment (~\$30 million): Combating the harmful effects of the opioid epidemic through enhanced access to treatment, medication, and educational resources. The Oversight Board recommends that \$10 million be invested in FY2020 and has included \$10 million for investment in both FY2021 and FY2022.
- Providing scholarships for healthcare students (~\$30 million): Addressing the lack of access to quality healthcare in underserved areas by providing funding support to healthcare students committed to serving these communities. The Oversight Board recommends that \$10 million be invested in FY2020 and has allocated \$20 million for investment in FY2021.

Enhancing healthcare services

Healthcare continues to be a priority for Puerto Rico, particularly in light of the Island's recent history of multiple natural disasters. Accordingly, the 2020 Fiscal Plan both preserves and supplements the strategic healthcare investments included in prior fiscal plans. Investments in healthcare include:

- Improving the Medicaid system (~\$265 million): Improving the availability and quality of healthcare to vulnerable populations by increasing reimbursement rates, expanding coverage for certain medications, and investing in IT programs.
- Maintaining nurse and health professional staffing levels (~\$173 million):
 Ensuring access to quality healthcare by retaining nurses and other health professionals.
- Capital expansions at public hospitals (~\$110 million): Bolstering capacity at public hospitals through major capital projects, such as construction of new wings starting in FY2021.

- Operationalizing the Comprehensive Cancer Center (\$30 million): Fully operationalizing the UPR Comprehensive Cancer Center through purchase of equipment and hiring of staff.
- Enabling operational efficiencies (~\$8 million): Funding to the Psychiatric Hospital for federal certification, materials and supplies for the Department of Health, and \$1.2 million incentive-based funding contingent on completion of an analysis that identifies back-office efficiency opportunities at the Department of Health and on the passing of legislation to consolidate ASES into the Department of Health.

Safeguarding public safety

The Oversight Board has made public safety a priority multi-year investment focus, including by making a major investment in police compensation. Multi-year investments across all public safety agencies include:

- Police compensation (~\$1.2 billion): Providing for increases to police salaries and benefits to improve recruitment and retention of sworn officers, as well as funding for overtime and backpay.
- Equipment and capital (~\$60 million): Funding for capital improvements and purchase of equipment for Police, Firefighters, and Forensics Institute.
- Firefighter compensation (~\$17 million): Funding to maintain the \$1,500 increase in firefighter salaries, and providing an additional salary increase.
- Emergency medical service providers (~\$6 million): Ensuring that there are sufficient emergency response personnel to assist residents, particularly in light of recent natural disasters and the ongoing COVID-19 pandemic.
- Forensics Institute personnel (~\$23 million): Hiring specialists at the Forensics Institute to address the backlog of cases.
- Efficiency and status of facilities study/analysis (~\$6 million): Incentive-based capex funding contingent on completion of a study to identify footprint consolidation and operational efficiency opportunities at the Department of Corrections.

Driving educational outcomes

The Oversight Board has devoted significant attention to the imperative to improve educational outcomes in Puerto Rico, evidenced by a multi-year investment program above and beyond the substantial federal funds available to the Government. These investments include funds for:

- Public school nurses and psychiatrists (~\$337 million): Protecting the physical and mental health of schoolchildren by ensuring that every public school has a nurse available and that all students have access to counseling support.
- English Language Learning (~\$5 million): Developing teaching resources to support improved English language education.
- Teacher and school director compensation (~\$285 million): Providing salary raises for transitory teachers and directors, which PRDE mistakenly excluded from the FY2019 and FY2020 salary raises previously funded by the Oversight Board.
- Needs-based scholarships (~\$179 million): Increasing funding for the UPR scholarship program to enhance access to higher education for those without the necessary financial means. This is in addition to the \$35 million already provided in FY2019, for a total of \$214 million for the scholarship fund.

- Textbooks, food, transportation, and other expenses (~\$65 million): \$3 million in funding to purchase new textbooks for students in addition to \$22 million provided in FY2020, as well as funds to support student food expenses, transportation, and equipment / materials.
- Teacher time and attendance (~\$6 million): Incentive-based funding for schools and directors that implement regular time and attendance reporting.
- Student attendance (~\$700,000): Incentive-based funding for schools that implement regular student attendance reporting.
- Digitalization of Individualized Education Programs (IEP) (~\$25,000): Funding to incentivize successful digitization of Special Education IEPs.
- School scorecards (~\$1 million): Incentive-based funding for school directors that perform well on scorecards, which are to be developed and implemented across all public schools.
- Education innovation (~\$7 million): Awards to be allocated through an education innovation school competition to schools for implementation of innovative programs and practices.

Strengthening the technology sector

To ensure Puerto Rico can compete in a global economy, the 2020 Fiscal Plan includes critical funds for technology infrastructure and workforce development programs. These include:

- Universal broadband access (\$400 million): Ensuring that all residents can benefit from access to online resources through incentives to expanded broadband roll-out and the provision of faster service.
- Establishment of a 21st Century Technical and Business Education Fund (\$50 million): Improving technical and business talent on the Island through programs designed to develop workforce skills that are aligned with the needs of the 21st century economy.

Growing the manufacturing sector in Puerto Rico

The manufacturing sector in Puerto Rico is another potential area that can help drive growth and establish more locally-driven economic activity. The 2020 Fiscal Plan includes the following investments:

■ Defining a comprehensive and actionable plan to reactivate the manufacturing sector: The Oversight Board will conduct a comprehensive study to update the facts and acquire the knowledge necessary for the private sector and the Government to define a comprehensive and actionable plan to reactivate the manufacturing sector in Puerto Rico.

Investments to transform government services

To accelerate transformation of government services, the Oversight Board has allocated incentive-based funding to encourage progress in priority areas. These investments include:

- Enterprise Resource Planning (ERP) system (~\$36 million): Incentive-based funding for Hacienda for progress and development of an ERP system.
- Financial reporting (~\$100,000): Incentive-based funding for more timely publication of Comprehensive Annual Financial Reports (CAFRs).

- Transparency of incentives for the private sector (~\$7 million): Incentive-based funding for regular publication of economic incentives for private corporations and associated returns.
- Retirement fund management (~\$2 million): Incentive-based funding for AAFAF to complete full implementation of segregated defined-contribution (DC) plan accounts.
- Additional staff for priority projects (\$44 million): Funds to hire additional staff
 in priority program areas, including GSA to centralize procurement and NAP
 implementation.
- Municipal service consolidation (\$110 million): Incentive-based funding for municipalities to consider different voluntary options for service consolidation in order to reduce costs. Municipalities that voluntarily choose to consolidate services will be eligible to receive a one-time financial incentive upon certification of such action by the Oversight Board. To fund this initiative, the 2020 Fiscal Plan would set aside \$22 million in each fiscal year through FY2025 for distribution among municipalities that complete service consolidations, once confirmed by the Oversight Board.

Supporting more effective investment of capital expenditures and infrastructure

To expedite Puerto Rico's reconstruction, and aligned with the Government's request for a working capital fund, the 2020 Fiscal Plan includes:

Working Capital Fund (\$750 million): A working capital fund will be made available to address the liquidity constraints associated with the reimbursement nature of disaster relief programs, subject to certain guidelines, restrictions, and best practices that the Oversight Board will establish. This will help to accelerate FEMA-approved reconstruction projects, particularly for permanent projects.³¹

Chapter 7. Strengthening Puerto Rico's technology sector

7.1 Broadband infrastructure

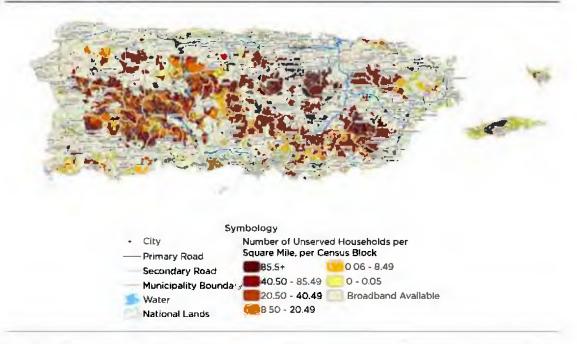
The 2012 Puerto Rico Broadband Strategic Plan (written by Connect Puerto Rico, in conjunction with the Puerto Rico Telecommunications Regulatory Board and Puerto Rico Broadband Taskforce) established a vision of a Puerto Rico with fast, robust, redundant, and ubiquitous broadband access. Broadband provides numerous socio-economic benefits to communities and individuals, including by improving labor market outcomes by enabling remote education, increasing business productivity through better connectivity, providing access to better health care through telemedicine for those in rural areas, and enhancing civic participation through better access to information.

During the recent COVID-19 pandemic, internet access has become even more important to residents' livelihoods. Across the US, telemedicine is becoming more widespread as a way to deliver health services safely. As public and private school systems alike move to distance learning models, students who do not have access to reliable, high speed internet are unable to participate — and therefore fall farther behind.

³¹ The working capital facility is considered a use of the Commonwealth balance sheet, not a Fiscal Plan expense.

Unfortunately, within Puerto Rico, while there was some growth in broadband deployment in 2011-2014 (driven by an aggressive capacity upgrade of cable networks, as well as the deployment of fiber by other broadband providers), critical broadband infrastructure gaps still exist, particularly across rural areas of the Island. As of 2014 (the most recent year for which data is available), while ~99% of urban households across Puerto Rico had access to speeds of at least 10 Mbps download and 1.5 Mbps, this was true for only ~66% of rural households .³² Broadband adoption figures across Puerto Rico also reveal a persistent gap among certain demographic groups. Broadband non-adopters in Puerto Rico were generally low-income groups, senior citizens, people with disabilities, and/or individuals with less education, which mirrors demographic trends on the US mainland and elsewhere. These gaps have possibly widened since Hurricane Maria, particularly in the mountainous region of Puerto Rico, where topography has hindered replacement of damaged infrastructure.

EXHIBIT 33: PUERTO RICO BROADBAND STRATEGIC ASSESSMENT (2015) – UNSERVED HOUSEHOLDS



Addressing the digital divide is critical to ensuring that all residents of Puerto Rico can take advantage of the many well well-documented socio-economic benefits afforded by Internet connections. These benefits are most evident when people have access to the Internet at speeds fast enough to be considered broadband; these speeds are required to facilitate full interaction with advanced online platforms.

To accelerate growth in broadband access and expand resident adoption and use of online resources in Puerto Rico, the 2020 Fiscal Plan allocates \$400 million in FY2021 (to be used over three years) to incentivize private sector investments in broadband build-out and to improve access to faster speed offerings in underserved areas. These investments should help overcome barriers to broadband expansion and ensure that all residents and enterprises in Puerto Rico benefit from this capacity. The goal is to set up funds to support expansion efforts in unserved and underserved areas through grant programs that fund a portion of the cost of deployment in these communities.

³² Puerto Rico Broadband Strategic Assessment, 2015

A successful broadband program will require strong leadership, accountability, continuity, and willingness to work with a broad range of entities, both within the Government and the private sector. While many similarities exist across state broadband programs and the activities that they are undertaking to close gaps in access, notable differences are also evident. These include the form and structure of the program, its life span, and the resources that the state has committed.

Some states, including Minnesota and Colorado, have broadband offices established by statute or executive order. Others, including Tennessee, have staff within an agency dedicated to supporting broadband programs.

The 2020 Fiscal Plan requires AAFAF to conduct a transparent, competitive procurement process as reviewed and approved by the Oversight Board to select an organization to serve as the administrator of these funds (the "Fund Administrator"). The selected Fund Administrator must have a staff of experienced professionals and a dynamic network of collaborators that include a broad range of private and government organizations. The Fund Administrator must also ensure accountability by requiring that all grantees demonstrate they are providing the service they were funded to deliver, while also providing the data needed to evaluate the program and progress toward defined goals. AAFAF must complete the procurement by December 1, 2020.

EXHIBIT 34: ALLOCATION OF STRATEGIC INVESTMENT FUNDING FOR TELECOM BROADBAND INFRASTRUCTURE (\$M)

FY21	FY22	FY23	Total
1.0	-	0.5	1.5
50.0	168.0	173.0	391.0
2.5	2.5	2.5	7.5
53.5	170,5	176.0	400.0
	50.0 2.5	FY21 FY22 1.0 50.0 168.0 2.5 2.5	FY21 FY22 FY23 1.0 - 0.5 50.0 168.0 173.0 2.5 2.5 2.5

Over the next three years, in partnership with the Federal Government and both public and private stakeholders, the Fund Administrator must collaborate to assess, evaluate, and map various opportunities for broadband expansion. Broadband inventory maps and technology assessment research will enable a better understanding of the Puerto Rico broadband market and help define infrastructure needs in underserved regions, as well as ensure that money is sent to the right places. The Fund Administrator, in collaboration with the broadband provider community, information and communication technology providers, **K-12** education stakeholders, the higher-education community, healthcare professionals, local government, grassroots community groups working to address the digital divide in their communities, and private sector groups for whom broadband is an essential investment asset, will be responsible for:

- Monitoring, measuring, and assessing the impact of broadband across the Puerto Rico economy
- Measuring and publishing aggregate, industry-wide data regarding broadband investment trends

- Measuring and publishing aggregate broadband use patterns
- Adjusting Puerto Rico economic indicators to estimate and monitor the impact broadband has on the overall economy

The Fund Administrator is tasked with developing a solicited proposal mechanism with the goal of providing funding to telecommunications operators and other Internet Service Providers to support broadband deployment in unserved and underserved areas. The Fund Administrator must institute grant reporting, data collection, and other accountability measures to ensure that funded projects deliver the promised service and provide data necessary for the state to evaluate progress toward its goals.

The Fund Administrator must ensure it leverages federal support for broadband expansion, by working to provide timely information and strategic planning support to broadband providers who can leverage FCC funding opportunities. The Fund Administrator, in collaboration with the Puerto Rico Broadband Taskforce, must also work to streamline construction permitting and planning and leverage existing public assets, such as poles, ducts, conduits, and rights-of-ways, to incentivize private broadband investments.

Through driving measuring, monitoring and strategic function to telecoms and internet service providers, the 2020 Fiscal Plan expects to improve the overall infrastructure on Island and to provide enhanced opportunities—through better and more equal access to education, healthcare, and information—for the people of Puerto Rico.

7.2 21st Century Technical and Business Education Fund

In addition to funding for telecom and broadband infrastructure, the 2020 Fiscal Plan recognizes the importance of investing to close core skill gaps and ensure the people of Puerto Rico are able to compete in a global economy. Creating an aligned, 21st century workforce that prepares residents of Puerto Rico to thrive is the central challenge to maintaining economic competitiveness over the next decade.

As the pace of technological change has accelerated, one core skill gap in Puerto Rico is around technical capabilities — especially among those who are not part of the digital native generation. To close the gap for these people who are already in the workforce, Puerto Rico must take a learner-centric approach to make it easier to access targeted technical education.

Meanwhile as businesses look for new skillsets, they are often willing to look beyond college graduates to fill open roles — especially for technical skills. According to a recent survey by Future Workforce, 90% of employers would hire candidates who validate their knowledge using a certification, digital badge, or coursework in lieu of a college degree. In addition, 55% of employers often offer jobs to people who have not finished college. Today, the number of both traditional and non-degree credentials is rising. There are now 315,067 unique credential programs from non-academic organizations, with the largest categories being digital badges and online course completion certificates. Coding bootcamps, which have appeared recently, were responsible for over 1,000 unique credentials.

In Puerto Rico, there are initiatives such as Codetrotters Academy, which offers 10-week certification programs in web and mobile development, and the Hobberton School, which recently opened a campus on the Island. However, these programs are limited and may not be affordable to many residents. In addition, they mostly focus on web development and programming, thereby leaving an array of important technical areas uncovered, such as cloud infrastructure, server administration, cyber security, business intelligence, AI, and machine learning. The universities in Puerto Rico, particularly private ones, have begun expanding

³³ Closing the Skills Gap 2019, Future Workplace and Wiley Education Services

continuing education and credential programs, but enrollment is low due to inability to afford tuition costs and ineligibility for Pell Grants. As a result, many university programs have closed.

Addressing the need for additional short-duration technical and business education opportunities requires forceful and forward-thinking leadership. To spearhead this drive for Puerto Rico, the 2020 Fiscal Plan allocates \$50 million for a 21st century Technical and Business Education Fund.

The 2020 Fiscal Plan requires AAFAF to conduct a transparent, competitive procurement process as reviewed and approved by the Oversight Board to select an organization to serve as the administrator of these funds (the "Education Fund Administrator"). The selected Education Fund Administrator must have a staff of experienced professionals and a dynamic network of collaborators that include a broad range of private and government organizations. AAFAF must complete the procurement by December 1, 2020.

The Education Fund Administrator will be tasked with developing a plan for 21st century skills for the entire workforce pipeline in Puerto Rico. The plan will identify the priority technical and business areas/skills to focus on, and the program will partner with multiple stakeholders in catalyzing and evolving the skills ecosystem. Scholarships would be made available for programs that are certified by the Education Fund Administrator, which would do so in alignment with the skill development plan. To support these efforts, the Education Fund Administrator must establish an engagement mechanism with stakeholders (e.g., a private sector taskforce), publish the results of its skills assessment report, create the supporting infrastructure for the scholarship program, and put in place a regular monitoring and evaluation process.

Furthermore, the plan will allow universities and private providers to develop and open programs in anticipation of fees from the scholars' enrollment. Given the importance of online learning, the plan should also encourage programs to be offered in multiple formats, be it online, on campus, or a hybrid of the two.

PART IV: Restoring growth to the Island

The fiscal and economic turnaround of Puerto Rico cannot be accomplished without the implementation of structural economic reforms that promote the transformation of the Island's economy and its workforce. Puerto Rico struggles from an uncompetitive labor market, unreliable energy and infrastructure, regulatory and other burdens that hinder business productivity, and low educational outcomes and workforce support — all of which prevent it from competing in a global economy and from attaining positive economic growth. Structural reforms—those that seek to strengthen the fundamental drivers of economic growth to encourage job creation, investment, and increased productivity—could transform Puerto Rico's future. Years of successive natural disasters and health crises further underscore the need for comprehensive Government action as outlined in this 2020 Fiscal Plan to reverse the economic challenges that have plagued the Island and its people for far too long. If implemented quickly and widely, structural reforms are projected to drive real economic growth, reversing decades-long economic challenges and enabling the Island's economy and its people to flourish.

Specifically, the Government must pursue the following structural economic reforms to achieve their forecasted economic impact:

- Human capital and welfare reforms that will improve the well-being and self-sufficiency of all Puerto Ricans, increase the quality and competitiveness of the workforce, enable investment, and facilitate the economic modernization of the Island, resulting in a cumulative GNP impact of 0.15% by FY2026.
- K-12 education reforms that will position all students to succeed in school and upon graduation by raising the quality of the Island's public schools, resulting in an additional 0.01% GNP impact per year starting in FY2037 (i.e., reaching 0.13% by FY2049).³⁴
- Ease of doing business reforms that will improve conditions for economic activity and business vitality, attracting new investment and creating jobs, resulting in a cumulative GNP impact of 0.30% by FY2025.
- Power sector reforms that will improve the availability, reliability, and affordability of
 energy for families and businesses, resulting in 0.30% cumulative GNP impact by FY2024.
- Infrastructure reform and capital investment that will improve the flow of goods, services, information, and people across the Island.

Unfortunately, while the Government has faced numerous unexpected disasters and crises that impeded implementation, it has also, at times, rejected the deadlines outlined in the Fiscal Plans. Together, this has resulted in delayed implementation on most of the identified structural reforms. For example, the Government has:

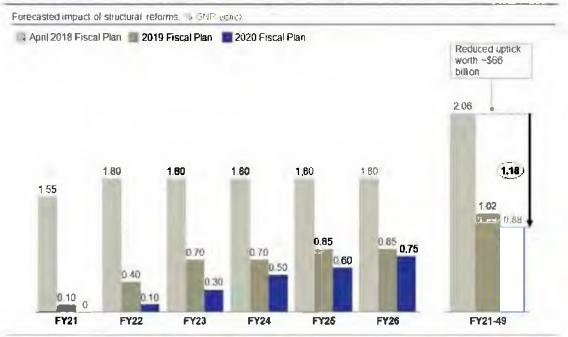
- Refused to pursue comprehensive private sector labor reform;
- Delayed implementation of the complementary Nutrition Assistance Program (NAP) work requirement;
- Made little progress in strengthening the Island's workforce development programs;
- Undertaken almost no discernible efforts to reform the Island's K-12 education system;

³⁴ Education reforms are projected to generate GNP impact after the first kindergarten class to benefit from those reforms completes their first year in higher education or the workforce. As such, this Certified Fiscal Plan assumes that the implementation of K-12 education reforms in FY2024 will generate GNP uptick starting in FY2037.

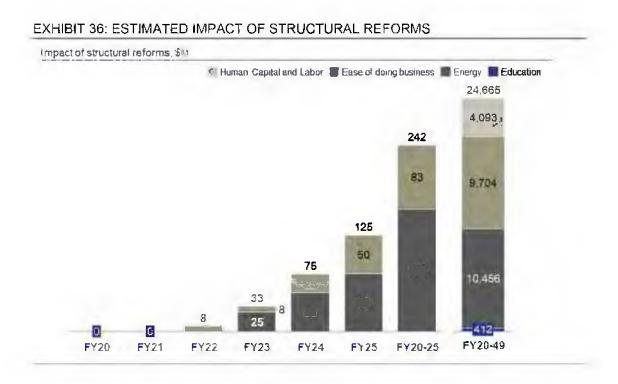
- Implemented very few of the required ease of doing business reforms in a way that would make the Island substantially more competitive and attractive to investors; and
- Implemented the Earned Income Tax Credit (EITC) but without a robust campaign to raise awareness of the new benefit and encourage work in the formal sector.

These delays have already diminished the projected economic uptick and revenues associated with structural reforms. Had the structural reforms above been implemented at the pace and scale forecasted in the 2019 Fiscal Plan, the Government would have generated 0.14% in additional GNP uptick, worth another \$10 billion in tax revenues by FY2049. This shortfall is even more pronounced relative to the structural reform impact forecasted in the April 2018 Fiscal Plan, whereby the Government would have generated 1.18% in additional GNP uptick, worth another \$66 billion in tax revenues by FY2049 (Exhibit 35). Not only have the residents of Puerto Rico lost opportunities to gain new skills, experiences and education, but the Island has lost time in attracting incremental investment that would produce jobs and tax revenues to be reinvested again into the people of Puerto Rico.

EXHIBIT 35: FORECASTED GNP UPTICK IN 2019 AND 2020 CERTIFIED FISCAL PLANS



Given the disruption and hardship brought about by the COVID-19 pandemic, the economic uplift that could be generated through structural reforms matters now more than ever. Urgent and comprehensive Government action is needed to promote economic recovery and opportunity for all Puerto Ricans. If implemented as specified in this Certified Fiscal Plan, structural reforms are projected to collectively generate an invaluable 0.75% GNP uptick by FY2026, as well as 0.88% in total GNP growth and more than \$24 billion in additional Commonwealth revenues by FY2049 (*Exhibit 36*). As discussed in *Chapter 6*, these revenues will play a key role in helping the Government address budget shortfalls in the medium- and long-term.



Chapter 8. Human capital & welfare reform

8.1 Basis for human capital and welfare reforms

As of 2019, Puerto Rico's formal labor force participation rate stood at 39%, the second-lowest in the world and far below US and Caribbean averages.³⁵ The youth unemployment rate is equally high—24.7%—roughly double the world average (12.7%) and three times the US average (8.4%).³⁶ Bringing labor force participation rate in line with that of even the lowest US state (West Virginia, with 54%) would improve employers' flexibility and create labor conditions closer to those on the mainland, driving economic growth and reducing poverty.³⁷

Puerto Rico's low labor force participation is primarily a function of public policy, namely, suboptimal welfare requirements and underperforming human capital development systems. The Island's low labor force participation predates the 2017 hurricanes, the 2019-20 earthquakes, the COVID-19 pandemic, and even the economic downturn that began in 2006. According to the World Bank, Puerto Rico's labor force participation rate has ranked in the bottom-20 of more than 200 global economies since at least 1990.³⁸

³⁵ For comparison, the US has a 62% labor force participation rate. In the Caribbean, the Dominican Republic's labor force participation rate was 64% in 2019, Jamaica and Haiti's rates were even higher (66% and 67%, respectively). See the World Bank Group via International Labor Organization, "Labor force participation rate, total (% of total population ages 15+)," 2019; and US Bureau of Labor Statistics, "Employment status of the civilian noninstitutional population 16 years of age and over by region, division, and state, 2018-19 annual averages," 2019.

³⁶ The World Bank Group via International Labor Organization, "Unemployment, youth total (% of total workforce ages 15-24)," 2019.

³⁷ US Bureau of Labor Statistics, "Employment status of the civilian noninstitutional population 16 years of age and over by region, division, and state, 2018-19 annual averages," 2019.

³⁸ See the World Bank Group via International Labor Organization, "Labor force participation rate, total (% of total population ages 15+)," 2019.

Suboptimal welfare requirements: Current welfare eligibility programs may disincentivize some residents from pursuing work within the formal economy in order to ensure sufficient nutritional support, housing and healthcare.³⁹ For instance, current welfare eligibility guidelines phase-out sharply as beneficiaries' income rise, informally taxing workers for seeking work within the formal economy.⁴⁰ This phenomenon is particularly pronounced in the case of recipients of public housing assistance: even securing a *part-time* minimum wage job can render a beneficiary ineligible for public housing, potentially forcing some beneficiaries to choose between formal sector work and keeping their homes.⁴¹ Revised eligibility guidelines and other policies that encourage residents to work could help resolve these issues.

Underperforming human capital development systems: 20% of working-age Puerto Ricans lack a high school diploma, nearly double the US average (12%), and only 45% of K-12 students have reached Spanish proficiency on META-PR exams (the Island's standardized tests). 42 Worker training programs, meanwhile, are rare and disjointedly managed by 15 local workforce boards. Strengthening the Island's education system and introducing coordinated workforce development programs could mitigate these challenges and help ensure that all Puerto Ricans are able to participate in the current and future economy.

Unfortunately, the Government has delayed the implementation of many human capital and welfare reforms intended to address these structural challenges, reducing the potential economic uplift to the Island and delaying the opportunity for residents in need of this critical support. Continued Government inaction will further jeopardize the development of Puerto Rico's human capital, the opportunities available to each resident of Puerto Rico for personal development and economic self-sufficiency, projected GNP uptick and its associated increases in tax revenues.

To realize the associated increases to GNP, the Government must begin implementing the following human capital and welfare reforms beginning in FY2021.

- Broadly-publicize the new Earned Income Tax Credit (EITC) by:
 - Hacienda: Transferring EITC promotional responsibilities to ADSEF
 - ADSEF: Designing a multifaceted EITC outreach strategy (including working with community organizations throughout the Island)
- Introduce a Nutritional Assistance Program (NAP) work/volunteer requirement by:

³⁹ Cordero-Guzmán, "The production and reproduction of poverty in Puerto Rico," in Nazario, ed. Poverty in Puerto Rico: A Socioeconomic and Demographic Analysis with Data from the Puerto Rico Community Survey (2014), 2016.

⁴⁰ For example, a single parent with two dependents and an annual income below \$4,900 was eligible to receive up to \$4,229 dollars in annual Nutritional Assistance Program (NAP) benefits in 2016. But, should this parent work 35 hours per week at minimum wage—generating approximately \$12,180 in annual earnings, they would become ineligible for NAP benefits. Net of taxes on their earning, full-time formal sector work would increase household income by only \$7,002—the equivalent of a \$3.86 effective hourly wage. Effective hourly wage income equals income received from formal sector work minus income lost from loss of benefits.

⁴¹ The US Department of Housing and Urban Development (HUD) sets income limits that determine the eligibility of applicants for assisted housing programs. For US states, the limit to be considered an "extremely low-income family" is determined by HUD using the Department of Health and Human Services (HHS) poverty guidelines. However, an alternative formula is used to define an extremely low-income family for Puerto Rico—30 percent of the median family income for an area or lower—which results in lower income limits. The current HUD income limits are so low that, in many cases, entering the formal labor market in a part time job at the minimum wage would result in losing eligibility for housing assistance. Thus, the existing income limits directly disincentivize formal employment and hinder economic mobility in Puerto Rico.

⁴² Federal Reserve Bank of New York, "An Update on the Competitiveness of Puerto Rico's Economy," 2014; Puerto Rico Department of Education, "Resultados META-PR 2018-2019: Medicion y Evaluacion para la Transformacion Academica de Puerto Rico," 2019; in 2019, only 47% of student attained proficiency in science, 39% in English, and 30% in mathematics.

- ADSEF: Creating a work/volunteer requirement compliant with Certified Fiscal Plan parameters
- ADSEF: Completing all administrative requirements (e.g. obtaining Federal Government approval) necessary to implement a work/volunteer requirement
- ADSEF: Verifying the eligibility of all adult NAP recipients for the new work/volunteer requirement

Create high-quality workforce development programs by:

- DDEC: Creating partnerships with private and social sector organizations to strengthen worker training
- DDEC: Conducting regular analyses to understand private sector labor market needs
- DDEC & Vivienda: Allocating resources in a data-driven manner
- DDEC: Removing structural barriers to employment (e.g. difficult in securing transportation and childcare to go to work)

8.2 Broadly publicize an Earned Income Tax Credit (EITC)

To promote labor force participation and reduce poverty, the Government should more comprehensively promote the available EITC for tax year 2020 and beyond. US policymakers implemented and promoted EITC across mainland states and have seen meaningful gains in formal labor force participation as a result, especially among low-to moderate-income workers. The credit is an effective anti-poverty tool, empowering beneficiaries to defray the cost of education, training, and childcare and support their own self-sufficiency. Since its creation in 1996, EITC has lifted 6.5 million people out of poverty (half of them children)—more than any other US based anti-poverty initiative. However, the value of the EITC is greatest when the targeted population is sufficiently knowledgeable of its value to a degree that influences daily decision-making around whether they will enter or stay in the formal economy and whether they will seek employment in Puerto Rico or elsewhere.

8.2.1 EITC design parameters

The 2019 Fiscal Plan required the Government to introduce an EITC adhering to the following parameters in tax year 2019:

- Program benefit is sized to account for the Island's relatively lower wages
- Individual benefit is dependent on a filer's marital status, number of dependents, and earned income verifiable through an employer-issued tax withholding statement
- Potential benefit increases as earned income rises to a cap, then plateaus, and then decreases at a phase-out income level until it reaches \$0 (Exhibit 37)
- EITC should be coupled with a robust promotional campaign to raise awareness of the benefit among potential claimants and encourage formal labor force participation

⁴³ To reward formal sector work, the credit reduces claimants' tax obligations and often generates a cash refund. For example, a \$1,000 increase in EITC benefit has been tied to a 7.3% increase in employment; see Hoynes and Patel, "How Does EITC Affect Poor Families," 2015.

EXHIBIT 37: EITC BENEFIT FORMULA

EITC Benefit Formula, S

- Benefits begin with the first dollar of reported income and increases at the phase-in rate (different depending on household size), up to the maximum credit
- Benefit increase ceases when income reaches the phase-in cap. Benefits remain constant at income
 levels that fall between the phase-in cap and phase-out start.
- When income reaches the phase-out start, benefits begin decreasing at the phase-in rate for each
 additional dollar earned, until income reaches the income cap (at which point benefits are \$0)

Number of Children	Phase-in rate, %	Phase-in cap \$	Phase-out start. \$	Individual/ Single in- come cap, \$	Married income cap, \$	Maximum Credit, \$
0	5.0	6,000	18,000	20,500	21,750	300
1	7.5	12.000	13,000	20,500	24,250	900
2	10.0	15.000	16, 00 0	28,500	34,750	1,500
3 or more	12.5	16,000	17,000	33,500	42,000	2,000

8.2.2 Current state and path forward

Although the Government has implemented an EITC adhering to the design parameters laid out above for tax year 2019, it has not coupled the credit with a robust promotional campaign as required by the Certified Fiscal Plan. Hacienda's EITC outreach efforts have centered primarily around sending circular letters detailing the benefit to tax preparers and establishing a handful of outreach centers across the Island to discuss EITC with potential filers in-person. The centers opened in late-February of this year, but their operations were cut short when all non-essential business operations were closed on March 15th as a result of the COVID-19 pandemic. By relying extensively on an in-person outreach campaign after the tax year was over and failing to establish a more robust promotional strategy (e.g. via digital channels, targeted marketing) throughout 2019, the uptake of the program and its intended benefits have been muted.

To maximize the uptake and benefits of EITC, the Government must accomplish the following actions by their respective deadlines:

EXHIBIT 38: REQUIRED IMPLEMENTATION ACTIONS FOR EITC

Actionitem	Committee of the Commit	Continue
Monitor EFFC filing data to prevent and detact fraud	 Hacienda 	 Ongoing
 Assume responsibility for managing EITC outreach writer year 2020 and beyond 	 ADSEF 	 July 16, 2020
 Design an EffC outreach strategy for tax year 2020 and share with Oversight Board 	■ ADSEF	 September 15, 2020
 Prepare EITC performance report and share with Oversight Board 	 Hacienda 	 September 15. 2020
 Meet with Oversight Board to discuss EFFC performance report and tax year 2020 promotional strategy 	 Hacienda, ADSEF 	 September 30. 2020
Launch new EITC promotional campaign	 ADSEF 	 Annually from January 1, 2021
Monitor ETTC uptake data in real-time to inform promotional campaign	 Hacienda, ADSEF 	 Ongoing each last year
Prepare EITC performance report and share with Oversight Board	 Hacienda ADSEF 	 Annually from June 1 2021
Discusa EITC performance with Overaight Board	 Hacienda, ADSEF 	 Annually from June 15, 2021

8.3 Introduce a Nutritional Assistance Program (NAP) work/volunteer requirement

To further support labor force participation, the Certified Fiscal Plan requires that the Government introduce a work/volunteer requirement for select adult NAP beneficiaries by FY2022. NAP is Puerto Rico's largest Government assistance program and provides nutritional assistance. Unlike mainland Supplemental Nutritional Assistance Program (SNAP) benefits, NAP does not include a work/volunteer requirement. The Federal Government requires that all able-bodied adult beneficiaries work, volunteer, or be enrolled in worker training classes for at least 20 hours per week to receive SNAP benefits. When well-designed, such requirements have led to increases in labor force participation. The implementation of a NAP work/volunteer requirement is critical to increasing labor market participation and the potential growth anticipated from human capital and welfare reforms.

8.3.1 Specific initiatives and design parameters

The Certified Fiscal Plan required the Government to adhere to a set of parameters when implementing a NAP work/volunteer requirement. Specifically, the Government should:

- Apply the requirement year-round to all able-bodied NAP beneficiaries aged 18-59⁴⁶
- Grant all eligible recipients up to a three-month transition period to secure employment, begin volunteering, or enroll in qualified education or training programs ("qualifying activities")
- Mandate that all eligible recipients complete 80 hours of qualifying activities per month

⁴⁴ NAP also differs from SNAP in that the former is funded as a block grant and is administered separately from the latter; see Center on Budget and Policy Priorities, "How Does Household Food Assistance in Puerto Rico Compare to the Rest of the United States?" 2020.

⁴⁵ For example, when the Federal Government first introduced a work/volunteer requirement for recipients of Temporary Assistance for Needy Families (TANF) benefits in the 1990s, the labor force participation rates of single mothers rose while poverty rates among single mothers and children both fell substantially. See Gitis, "A Menu of Options to Grow the Labor Force" 2017, and Gitis and Arndt, "The 20th Anniversary of Welfare Reform," 2016.

⁴⁶ As such, all NAP recipients who are under the age of 18, older than the age of 59, or medically certified as physically or mentally unfit for employment should be excluded from the work/volunteer requirement.

- Redesign NAP eligibility guidelines and benefit calculations to ensure that eligible recipients are not penalized for seeking formal sector work
- Redistribute savings realized through the work/volunteer requirement to boost working eligible recipients' take-home pay through an expansion of the Earned Income Disregard (EID)⁴⁷
- Continue to extend NAP benefits to children even if their parents are eligible recipients who do not comply with the work/volunteer requirement

8.3.2 Current state and path forward

Unfortunately, the Government has made no meaningful progress in the implementation of this work/volunteer requirement as of May 2020. The Government has yet to meet any major milestones in the implementation of this reform, including designing the requirement itself. Additionally, the Government insists that the work/volunteer requirement must be implemented in three-month phases (i.e. a three-month requirement in year one, a six-month requirement in year two, etc.) over the course of four years, further delaying implementation.⁴⁸ By implementing this requirement in three-month phases, it is unlikely to have any positive effect until the end of the four years. Delays to the implementation of the work/volunteer requirement will inhibit efforts to boost labor force participation and could further diminish the GNP uptick, tax revenues, and improvement in economic opportunities for Puerto Ricans projected to follow.

To rectify this situation, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 39: REQUIRED IMPLEMENTATION ACTIONS FOR NAP WORK REQUIREMENT

	Action item	Owner	Deadline
	 Design a NAP work/volunteer requirement proposal compliant with parameters above and share with the Oversight Board 	- ADSEFT	 July 1, 2020
	Meet with the Oversight Board to discuss proposal	• ADSEF	- July 15, 2020
	Submit proposal to FNS ²	• ADSEF	 August 1, 2020
	 Assess operational requirements needed to implement the work/volunteer requirement as proposed 	ADSEF	October 15, 2020
1	Discuss operational requirements with the Oversight Board	ADSEF	 October 31, 2020
	Receive work/volunteer requirement approval from FNS	ADSEF	 November 1 2020
	Publish FNS-approved State Plan aligned with Certified Fiscal Plan parameters	 ADSEF 	 December 15, 2020
	 Retain a qualified third-party analytical firm acceptable to the Oversight Board to overses implementation 	• ADSEF	 January 31, 2021
	Complete review of all NAP recipients to verify work/volunteer requirement eligibility	• ADSEF	 June 30, 2021
	Implement full-year work/volunteer requirement	• ADSEF	July 1. 2022
	End three-month transition period for eligible recipients	 ADSEF 	 September 30, 2022
	Validate work/volunteer_requirement implementation with the Oversight Board	Third-party firm	 November 15, 2022
I	 Publish annual report on NAP program and work/volunteer requirement performance 	• ADSEF	 Annually from Augus 15, 2023

¹ The Farmy Secto Economic Coveragement Administration ACSES in currently reactionate for permittening It AD pore tig. 20 S. Department of Agriculture Fined and Authority Service.

⁴⁷ The EID allows Government assistance beneficiaries to exclude a portion of income earned through formal sector work from welfare benefit calculations. An increase in the EID can boost an aid recipient's take-home pay by allowing the claim Government benefits that they otherwise would not be eligible for due to an increase in earned income.

⁴⁸ Initially, the Government cited a lack of personnel and technical resources to justify phased implementation, which it stated would begin in October 2019, to which the Oversight Board responded by increasing the Department of Families (DOF)'s FY2020 budget by \$4.7MM to hire additional case workers for the NAP program. After securing additional funding, the Government reversed course and now insists that phased implementation is necessary given a lack of jobs and qualified workers on the Island, further delaying the start of phased implementation.

8.4 Create high-quality workforce development programs

To facilitate labor force participation, the 2020 Fiscal Plan requires that the Government more effectively trains residents on the knowledge and skills needed to contribute to the economy by laying the groundwork for an overhaul of the Island's workforce development system in FY2021. Currently, the Island's worker training programs are disjointedly managed by local workforce development boards and are too limited in scope to support the development needs of Puerto Rican workers at all stages of their working life cycles. Moreover, the Government has not conducted the analyses or outreach necessary to target the Island's most-pressing talent gaps. Inadequate preparation and training have left many Puerto Ricans without a real opportunity to succeed in the formal labor force. The COVID-19 pandemic has exacerbated these issues, meaning that empowering workers to enter or re-enter the workforce will be especially important in the months and years to come.

8.4.1 Specific initiatives and design parameters

To strengthen workforce development programs and promote participation in the formal economy, the Fiscal Plans have required that the Government complete several initiatives by the end of FY2020:

- Centralize the administration of Workforce Innovation Opportunity Act (WIOA) funds the primary vehicle for federal investments in workforce development—under the Department of Economic Development and Commerce (DDEC)
- Promote the signing of Memoranda of Understanding (MOUs) between local worker training boards and Government agencies to strengthen training and defray costs
- Conduct the rigorous data analyses outlined throughout this chapter to leverage workforce development funds in a data-driven manner to reduce labor market talent gaps
- Update the WIOA State Plan with a roadmap to prioritize and eliminate those talent gaps

8.4.2 Current state and path forward

Unfortunately, the Government's progress in overhauling the Island's worker training systems is limited to the centralization of WIOA funds under DDEC. Local boards (the ultimate authorities on WIOA-funded programming in their respective regions) continue to offer workforce programs of disparate and inconsistent quality, and many have delayed signing MOUs with Government agencies. Moreover, while DDEC updated its WIOA State Plan in March 2020, DDEC did not conduct the required labor market analyses to identify talent gaps or propose solutions to those gaps within the updated plan. As such, current initiatives may not be well-attuned to the current and future needs of the Island's employers and its economy.

To develop high-quality worker training programs that empower all residents to reach their fullest potential and enter the labor force, the Government must first **implement strategic** and administrative enablers throughout FY2021. As such, DDEC must:⁴⁹

 Create partnerships to strengthen worker training by identifying private and social sector leaders to serve on the board of the Workforce Development Partnership Office (WDPO), a sub-office within DDEC's WIOA program that will coordinate workforce

⁴⁹ U.S Department of Labor Employment and Training Administration, "Best Practices, Partnership Models, and Resources Available for Serving English Language Learners, Immigrants, Refugees, and New Americans," 2017; Center for Law and Social Policy, "WIOA: What Human Service Agencies and Advocates Need to Know," 2015.

development programs with the private and social sectors, and operationalizing the WDPO⁵⁰

- Conduct analyses to understand labor market needs by analyzing the Island's labor market to identify talent gaps and developing a workforce development coordination strategy between DDEC and Vivienda⁵¹
- Allocate resources in a data-driven manner by developing metrics to evaluate all
 uses of workforce development funds, consolidating the 15 local workforce development
 boards into larger regional boards, and implementing performance-based budgeting for
 all regional worker training boards⁵²
- Remove barriers to employment by developing a pilot program to reduce employment barriers for working parents, low-income families, and persons affected by mental illness

In turn, these enablers will empower and implement human capital initiatives that **support** the developmental needs of Puerto Ricans at all stages in their working life cycles ("life cycle initiatives") in FY2022 and beyond. As such, DDEC must:

- Work with PRDE to reform education to enable everyone to graduate high school (see Chapter 9 and Section 13.3)
- Prepare high schoolers for success in college and the workforce by designing a
 dual enrollment pilot program that enables high school students to take college-level
 classes and earn an associate degree alongside their high school diploma, and creating a
 strategy to expand and leverage vocational education to address talent gaps
- Empower college students to obtain job skills and research by designing employer guidelines and an outreach strategy to expand the number of high-quality coops and internships available to college students, and expanding opportunities for college students to conduct STEM research
- Create training programs tailored to employer needs by designing a strategy to
 create high-quality apprenticeships to address talent gaps, and developing a customizable
 workforce development pilot program that leverages local technical colleges to provide
 qualified employers no-cost tailored training programs

In Minneapolis, MN, the International Institute of Minnesota (IIM) offers job training, language classes, and other services to local and immigrant audiences. In partnership with St. Paul College, the organization helps participants obtain a home health aide certification and provides additional education opportunities to obtain higher-paying nursing certifications. Meanwhile, across Illinois, workforce development programs that subsidized the cost of employing workers while the acquired additional skills or credentials has benefitted workers and employers allike. Specifically, workers managed to acquire critical work experience and education while covering their basic living expenses, while companies reported a range of benefits, including improved customer serve and the ability to expand more quickly. See Social IMPACT Research Center, "Putting Illinois to Work Evaluation: An Early Look," 2010.

⁵¹ In McAllen, TX, the Broader Workforce Alliance uses a data-driven approach to align workforce development programs to local employer needs. The program has served more than 7,700 individuals, placed 90% of candidates into job opportunities, and has led to a 230% increase in wages among participants. See Project QUEST's homepage at https://www.questsa.org/.

In Seattle, WA, the Ready to Work (RTW) program specializes in preparing immigrants and refugees to enter the workforce. The program couples job training via local colleges and non-profits with comprehensive data monitoring to track participant outcomes as they enter the workforce. These include language skills (e.g. progression in English skills), participation (e.g. attendance and advancement in RTW and higher-level non-RTW programs), employment and self-sufficiency (e.g. initial and second job placements, retention rates), educational advancement (advancement on and progression through next-level courses), and continuing participation in English language acquisition (continued engagement in English language learning initiatives). RTW's use of data to improve participant outcomes helped the program secure the US Department of Labor's Employment and Training Administration's commendation in its official WIOA Operating Guidance. See U.S Department of Labor Employment and Training Administration, "Best Practices, Partnership Models, and Resources Available for Serving English Language Learners, Immigrants, Refugees, and New Americans," 2017.

Subsidize training programs to support lifelong learning by designing lifelong learning pilot program to subsidize adult residents' access to high-quality technical education courses that can address pressing talent gaps

DDEC and Vivienda are best-positioned to oversee the development and implementation of these life cycle initiatives. As the administrator of WIOA funds, DDEC can fund the analyses and establish the partnerships needed to produce high-quality workforce development programming.⁵³ To align with the Community Development Block Grant-Disaster Recovery (CDBG-DR) Action Plan certified by the Oversight Board, Vivienda (which will manage a \$40 million Workforce Training Program to better prepare workers for construction, hospitality and tourism, healthcare, technology, and manufacturing jobs), should coordinate its efforts with DDEC.⁵⁴

Finally, to create a roadmap for the overhaul of workforce development systems, **DDEC must create a Strategic Plan for Workforce Development (SPWD)** that details analytical findings; KPIs, milestones, and targets; implementation strategies; pilot program results; and implementation progress for all enablers and life cycle initiatives. This should be regularly updated alongside the WIOA State Plan and an analysis of relevant labor market gaps and trends outlined in *Section 8.4.4.* ⁵⁵ Making such a plan publicly available will enable the public to evaluate the pace, quality, and difficulties realized in the overhaul of workforce training system.

8.4.3 Strategic and administrative enablers

DDEC must create a Workforce Development Partnership Office (WDPO) to manage interactions with private and social sector leaders and support the creation of high-quality workforce development programming by the end of FY2021. The WDPO board should be comprised of leading public, private, and social sector leaders who provide a high-level strategic vision for the WDPO's overarching efforts. The WDPO's day-to-day operations, meanwhile, should be staffed and directed by qualified DDEC employees (e.g. WIOA personnel) transferred to support the WDPO's needs on a full-time basis and led by an executive director appointed by the Secretary of DDEC. On the mainland, similar partnerships have played important roles in strengthening workforce development programs. ⁵⁶ The WDPO board should include leading business, education, and civic leaders from across the Island, including the chief executive of Invest Puerto Rico (IPR). ⁵⁷ The WDPO will play a crucial role in executing future two-stage labor market analyses (see Section 8.4.4) by providing DDEC

⁵³ WIOA funds are intended to support initiatives to train youth, adult, and dislocated workers as well as apprenticeships. Given their knowledge of local and regional needs, DDEC should also leverage the expertise of local WIOA boards, which are responsible for the administration of WIOA funds and workforce programming in their respective regions, and non-governmental workforce development organizations where appropriate.

⁵⁴ Per the Action Plan, the Workforce Training Program should promote workforce development in the construction, hospitality and tourism, healthcare, technology, and manufacturing industries. Action Plan Amendment Three was submitted to the Oversight Board for certification on February 24, 2020 as required by the Second Grant Agreement with the US Department of Housing and Urban Development for Puerto Rico's Community Development Block Grant-Disaster Recovery (CDBG-DR) grant. The Action Plan was certified by the Oversight Board as compliant with the Certified Fiscal Plan on April 14, 2020.

DDEC is required by the US Department of Labor Employment and Training Administration to update the WIOA State Plan every four years. While the two documents will often complement one another, the WIOA State Plan and SPWD must remain separate documents as the former concerns the use of WIOA funds that cannot, due to Federal limitations on the scope of WIOA programming, serve as a roadmap for all initiatives contained that should be contained within the SPWD.

For example, the Atlanta Committee for Progress (ACP), a public-private partnership, offers Atlanta mayors access to more than 40 business, education, and civic leaders to devise solutions to workforce-related issues. Most recently, an effort between the ACP, Atlanta Technical College, and the city of Atlanta created a Center for Workforce Innovation (CWI) to train local workers in skillsets highly-sought by local companies with grants from the private sector and WorkSource Atlanta, the city's workforce development agency. The CWI was made possible by a \$2 million grant from local corporations and will support three career tracks: aircraft technical skills, information technology, and skilled trades. To better support students, the CWI offers a tuition balance forgiveness program and transportation vouchers for students. WorkSource Atlanta, meanwhile, offers tuition assistance of up to \$10,000 per qualifying student.

⁵⁷ IPR serves as the Island's investment promotion agency and is responsible for attracting off-Island investments into the Island

with relevant data and insights to help identify talent gaps within the Island's labor market. It will also help DDEC design and implement high-quality workforce programming, and enable the connection of trained workers with employers fully-prepared to utilize their skillsets.

To operationalize the WDPO by the end of FY2021, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 40: REQUIRED IMPLEMENTATION ACTIONS FOR WDPO

	Action item	Ostin	Deadline
	Identify potential WDPO board members and appoint members	• DDEC	September 30 2020
	 Identify the WDPO's operational requirements and discuss them with the Oversight Board 	• DDEC	 November 15, 2020
	Operationalize the WDPO (e.g. transfer relevant DDEC personnel)	• DDEC	 January 31, 2021
	 Begin supporting DDEC and Vivenda in (1) designing relevant programming to address human capital needs identified through the two-stage analysis and (2) developing the DDEC-Vivenda coordination strategy 	• WoPo	 February 1, 2021
	Select the WDPO executive director	• DDEC	 March 31, 2021
To be completed in FY2022 and beyond	Publish annual report on WDPO performance	• WDPO	- Annually from August 15, 2022

8.4.4 Analyses to understand labor market needs

To create impactful workforce development programs, the Government must first conduct an analysis of the Island's labor market to identify talent gaps. Per the Oversight Board's certification of the CDBG-DR Action Plan, Vivienda must ensure that the Workforce Training Program (WTP) creates skilled workers that meet employer needs. The WTP will aim to better prepare workers for employment in the construction, hospitality and tourism, healthcare, technology, and manufacturing sectors—efforts which will dovetail with DDEC's own efforts to realign its own workforce development opportunities to support key industries on the Island. As such, Vivienda should coordinate the broader objectives and strategies leveraged by the WTP with DDEC's own workforce development efforts.

In the first stage, DDEC must identify the current and potential talent needs of employers that will shape their demand for workers. In this stage, DDEC must determine current and future talent demands of employers on the Island, current skill and knowledge gaps among existing workers (informed by employers), and the availability, cost, and quality of the Island's talent supply. It should also draw on relevant benchmarks and best practices, as well as key labor market trends to inform future talent needs.

In the second stage, DDEC must discern the available resources and trends that will shape the supply of talent to meet employers' needs. As such, DDEC must identify the resources currently available to train workers to meet employer needs, new resources that workers will leverage to develop relevant skillsets, the amount of training currently offered through employers, and potential private and social sector partners that can help in training or reskilling workers.

To ensure that the two-stage analysis fully informs workforce development efforts, the Government must accomplish the following action items by their respective deadlines:

	Action item	Dynar	Deadline
	 Conduct the two-stage analysis, leveraging insights from private and social sector partners and share with Vinenda 	• DDEC	 December 31, 2020
	Define strategy to coordinate Vivienda and DDEC workforce training initiatives	DDEC, Vivienda	 March 15, 2021
	Share two-stage analysis results and coordination strategy with Oversight Board	DDEC, Vmenda	 March 15, 2021
	Discuss two-stage analysis results and coordination strategy with Oversight Board	DDEC, Vivienda	 March 30, 2021
	Update the WIOA State Plan and SPWD with two-stage analysis results and coordination strategy and share with Oversight Board	• DDEC	 April 30, 2021
To be completed in FY2022 and boyond	 Repeat the two-stage analysis to update the WIOA State Plan and SPWD and refocus life cycle initiatives 	• DDEC	Quadrennially from December 31, 2023

8.4.5 Allocate resources in a data-driven manner

To maximize the number of workers that can benefit from redesigned workforce development programs, the Government must analyze data to confirm that workforce funds are used transparently, efficiently, and effectively. Routine and comprehensive internal data analysis will enable DDEC and Vivienda to make interventions where appropriate and reallocate WIOA, CDBG-DR, and other workforce development funding to boost impact in future years. Potential metrics to analyze include:

- Employment and worker self-sufficiency (e.g. employed participant retention rates, average duration of first employment upon program completion, wages over time, etc.)
- Program quality (e.g. participant attendance rates, employer satisfaction rates with participants' training, percentage of corporate partners who hire participants, etc.)
- Workforce attraction (e.g. percentage of unemployed workers who inquire about a program, percentage of inquiring workers who participate in a program, etc.)

To support the efficient and transparent use of WIOA funds, DDEC must also reform the management and funding of local workforce development boards. Local boards employ variable approaches to the administration of workforce development programs in their regions—to varying degrees of success. As such, DDEC must:

- Consolidate the 15 local boards into larger regional entities to enable well-performing boards to take over underperforming peers and benefit from economies of scale
- Ensure that regional boards sign MOUs with Government agencies to strengthen training programs while defraying programming costs, facilitating the redeployment of workforce development funds to support other high-performing initiatives
- Leverage performance against the aforementioned metrics to set regional boards' annual budgets based on prior-year performance to promote efficient and effective uses of workforce development funds at the regional level

To ensure that workforce development funds are used in a data-driven manner, the Government must accomplish the following actions by their respective deadlines:

EXHIBIT 42: REQUIRED IMPLEMENTATION ACTIONS FOR DATA-DRIVEN RESOURCE ALLOCATIONS

	Action item	Demer	Deadine
	 Define proposed metrics to evaluate uses of WIOA CDBG-DR, and other workforce funds and share with Oversight Board 	 DDEC, Vivienda 	 September 15, 2020
	Discuss proposed metrics with Oversight Board	DDEC, Vivienda	 September 30, 2020
	 Review current data-tracking capabilities to identify metrics that cannot be readily-tracked 	DDEC. Vivienda	 October 15, 2020
To be	Finalize build-out of previously unavailable data-tracking capabilities	DDEC, Vivienda	 March 31, 2021
completed in FY2021	Complete the consolidation of local WIOA boards into regional administrations	• DDEC	 March 31, 2021
	 Design a performance-based budgeting strategy for regional WIOA boards and share with Ovarsight Board 	• DDEC	 April 15, 2021
	Discuss performance-based budgeting strategy with Oversight Board	• DDEC	 April 30, 2021
	Update SPWD with metrics to track across workforce initiatives and performance- based budgeting strategy	• DDEC	 May 15, 2021
	Begin tracking performance of all workforce development initiatives relative to metrics	DDEC, Vrvienda	- July 1, 2021
To be completed in FY2022	 Finalize the first performance-based budget for all regional administrations and share with Oversight Board 	• DDEC	 April 15, 2022
and Deyond	Discuss performance-based budget with Oversight Board	• DDEC	 April 30, 2022
	 Update SPWD regarding performance of regional boards and workforce development initiatives relative to matrics 	• DDEC	 Annually from Augus 15, 2021

8.4.6 Remove structural barriers to employment

The Government must also introduce measures to ensure that new entrants into the formal economy can retain employment. Transportation, childcare, and mental health-related issues, for example, can temporarily inhibit an otherwise willing worker from pursuing employment in the formal economy. Mainland jurisdictions have used several solutions, including job counseling, paid transitional employment, and two-generation strategies that educate parents alongside their children, to tackle many of these same barriers. With 58.3% of Puerto Rican children living in poverty and years of traumatic natural disasters and health crises, the Government's efforts should initially prioritize reducing employment barriers for working parents, low-income families, and persons affected by mental illness. 59

To reduce barriers to employment, the Government must accomplish the following actions by their respective deadlines:

For example, a New York's Center for Employment Opportunities offers formerly-incarcerated persons job training, paid transitional employment, and career counseling; post-enrollment, participants are 48 percent likelier than non-participants to gain full-time employment and 19% less like to be re-convicted or -arrested for a felony; see Center for Employment Opportunities, "Research Results," and Bloom, et. al., "Four Strategies to Overcome Barriers to Employment: An Introduction to the Enhanced services for the Hard-to-Employ Demonstration and Evaluation Project," 2007.

⁵⁹ Rosa-Rodriguez, "State of mental health services for children in Puerto Rico: Mental heal services for Puerto Rico's children are not a luxury but a necessity," 2019.

EXHIBIT 43: REQUIRED IMPLEMENTATION ACTIONS FOR EMPLOYMENT BARRIER REDUCTION

Action item	Chaner	Deadloe
 Create a working group comprised of DOF, DOLHR, DRD, PRDE, ASSMCA, Vivienda, and DDEC 	- ODEC	 July 1, 2020
 Design pilot program to reduce employment barriers for working parents, low-income families, and persons affected by mental illness1 	 Working group 	 November 15, 2020
Discuss pilot program with Oversight Board	Working graup	 December 15, 2020
Update SPWD with pilot program design	• DOEC	 January 31, 2021
Launch pilot program	• TBC	 July 1, 2021
 Update strategy with roadmap to serve additional populations facing significant employment barriers 	• DDEC	 March 31, 2022
Begin broadening barrier reduction initialive to support additional populations	• TBO	 Ongoing from July 2022
Update SPWD with pilot program results	• DDEC	 August 15, 2022
Update SPWD with broader barrier reduction initiative results	• DOEC	Annually from August 15, 2023

8.4.7 Life cycle initiatives

Prepare high schoolers for success in college and the workforce

To support students at the beginning of the working life cycle, the Government should offer programming to prepare high schoolers for success in higher education or the workforce. The Government must expand vocational education and refocus coursework to address major talent gaps to enable more workforce-bound students to develop marketable skillsets that increase their likelihood of successfully integrating into the labor force. For college-bound students, the Government should also broaden access to dual enrollment programs that position students to excel in college and expedite their entry into the workforce.

Although dual enrollment programs can help students excel in high school and college and expedite their entry into the workforce, Puerto Rican students have limited access to such programs. Dual enrollment programs allow high schoolers to take college courses in high school and get credits for an associate or bachelor's degree before college thereby accelerating their entry into the workforce, and enable high-achieving students to complete an associate degree alongside their high school diploma in some mainland jurisdictions. 60 These programs, which are typically offered to Puerto Rico to high-achieving students or high schoolers affected

⁶⁰ Florida's Early College Program, for example, allows dual enrolled students to work toward an associate degree without paying tuition fees; see Legg, *Early College programs can help Florida build on its education success," 2019,

by natural disasters on a temporary basis, have numerous benefits, including stronger performance in high school and college. 61,62

To enable high schoolers to benefit from dual enrollment and programs, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 44: REQUIRED IMPLEMENTATION ACTIONS FOR DUAL ENROLLMENT PROGRAM

Action item	Оутег	Deadline
 Establish a working group composed of PRDE local universities (including UPR), the WDPO, and DDEC 	• ODEC	 March 31, 2021
 Design dual enrollment pilot program that awards college credits and enables high- achieving students to obtain an associate degree alongside their high school diploma! 	 Working group 	 July 31 2021
 Define criteria for subsidizing well-performing dual enrolled students' tuition costs to promote accessibility 	• DDEC	 September 15, 202
 Share design and accessibility criteria with Oversight Board 	• DDEC	September 15, 202
 Discuss pilot program design, including projected costs, and accessibility criteria with Oversight Board 	• DDEC	 September 31, 202
 Identify private partners to help subsidize dual enrollment courses that align with their talent needs 	DDEC. WDPO	 Ongoing from October 31, 2021
 Update SPWD with pilot program design and roadmap to broaden dual enrollment access 	• DDEC	 November 15, 202
Eaunch pilot program	 PRDE universibes 	January 2022
 Update SPWD with pilot program results 	• DDEC	 July 31, 2022
Begin broadening dual enrollment initiative beyond pilot program	PRDE universities	 Ongoing from August 2022
Update SPWD with dual enrollment program results	• DDEC	 Annually from July 21, 2023

Meanwhile, access to vocational education, which can help workforce-bound students integrate into the labor force, is also limited. Puerto Rico's vocational education programs enable students to take occupational coursework as part of their high school course load and "specialize" in specific concentrations (e.g. information technology, mechanical studies)—a practice that researchers have linked to higher potential earnings. 63 Such programs allow high-performing students to earn occupational certifications alongside their high school diploma, boosting their labor force marketability. However, they are currently available at only 15 of PRDE's high schools and are not necessarily aligned to address the Island's mostpressing talent gaps.

The University of Puerto Rico-Mayaguez (UPR-Mayaguez)'s R2DEEP program, the leading dual enrollment initiative in Puerto Rico, has served high-achieving students with an interest in engineering for several years, but space is limited to just several dozen students and tuition can exceed \$240 per credit. Several small universities, such as Columbia Central University, also enable students to complete college courses during the school year or summer breaks. In the aftermath of the 2019-20 earthquakes, PRDE also partnered with a handful of universities to offer online college courses to high schoolers from the most-affected areas. Although this initiative approximates a fully-fleshed dual enrollment initiative, the program was established as a temporary solution to education disruptions, focuses on students from affected areas, and does not offer high-achieving students associate degrees. See University of Puerto Rico-Mayaguez, "R2DEEP Requirements and Costs"; El Vocero, "Oportunidad para adelantar estudios universitarios," 2018; and Alicea, "Educacion lanza cursos en linea en conjunto con siete universidades," 2020.

A study in California, for example, concluded that students who participated in dual enrollment classes were more likely than their peers to graduate from high school, enroll in four-year colleges, and succeed in college. California's efforts to expand access to dual enrollment programs (e.g. offering free textbooks) have widened participation (one in eight California high schoolers are dual enrolled) and boosted student achievement (90% of participants earned college credit). Once in college, the study concluded that previously dual enrolled students accumulated more college credits and were less likely to take remedial classes than their peers; see Hughes, et. al., "Broadening the Benefits of Dual Enrollment," 2012, and EdSource, "High school students benefit from taking college courses, but access uneven in California," 2020.

⁶³ One mainland study, for example, found that higher wages among vocational high school graduates were entirely associated with their completion of upper-level coursework and concluded that each additional year of exposure to that coursework had accounted for a 2% wage increase; see Kreisman, et. al., "Vocational and Career Tech Education in American High Schools: The Value of Depth Over Breadth," 2016.

To enable all high schoolers to take advantage of vocational education, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 45: REQUIRED IMPLEMENTATION ACTIONS FOR VOCATIONAL EDUCATION PROGRAMS

	Action item	Dynxer	Deadline
In he	 Establish a working group comprised of PRDE_DOLMR*, local technical colleges_IPR, the WDPO, and DDEC 	• ODEC	 March 31, 2021
completed in FY2021	 Assess performance of PRDE-managed vocational high schools and programs and share findings with Oversight Board 	Working group	 May 30, 2021
	Discuss performance of current PRDE vocational programs with Oversight Board	- DDEC PRDE	- June 15, 2021
	 Design strategy to (1) address current vocational program shortfalls (2) offer all PRDE high schoolers vocational education, and (3) re-align vocational curriculum to address talent gaps identified through two-stage labor market analysis² 	 Working group 	 November 30, 202
	Discuss vocational education strategy with Oversight Board	• DDEC	 December 15, 202
To be completed in FY2022	 Identify private partners to help subsidize vocational education courses that align with their talent needs¹ 	DDEC, WDP0	 Ongoing from January15, 2022
and beyond	Update SPWD with vocational education strategy	• DDEC	 January 31, 2022
	Implement vocational education strategy	 PRDE colleges 	 August 2022
	Update SPWD with vocational education program results	• DDEC	 Annually from July 31, 2023

Empower college students to obtain job skills and pursue research

To facilitate the entry of college students into the workforce, the Government must broaden opportunities for students to develop "real world" skills actively sought by employers and conduct academic research. An increase in experiential learning opportunities—namely, co-ops and internships—would allow students to hone skillsets through part- or full-time employment before graduation. Meanwhile, increasing research opportunities for college students would broaden students' exposure to STEM industries and develop skillsets sought by the Island's STEM-centric employers.

Co-ops and internships help student develop marketable skillsets and enable employers to find qualified talent, but only some of college students can benefit from such programs. Indeed, high-quality co-ops and internships have been linked to improved employment odds, higher job satisfaction, and greater promotion odds among participants, but opportunities are primarily geared toward the highest-performing engineering students.^{64,65}

The Government may be able to leverage WIOA and CDBG-DR funds to help defray the costs of expanding access to co-ops and internships.⁶⁶

D'Abate, "Developmental interactions for business students; Do they make a difference?" 2010.

UPR's Cooperative Engineering Education Program (referred to as "COOP") has promoted co-ops for more than 40 years, but access to COOP is limited to UPR students and primarily geared toward engineering students (with some exceptions). Similarly, readily-available internships (as determined through a web search for "internships in Puerto Rico" in April 2020) are primarily offered by large multinational firms (e.g. biopharmaceutical companies and financial services firms) are relatively few in number, limiting opportunities to a small cohort of successful applicants. See University of Puerto Rico, "Celebran 40 aniversario del Programa Coop de Ingeniería," 2017, and University of Puerto Rico-Rio Piedras, "Experiencia de Educacion Cooperativa (COOP)."

Federal law requires that the Government use 20% of WIOA funds to support youth work experiences. Moreover, DDEC is permitted to submit funding proposals for co-op and internship programs that support key industries under the terms of the CDBG-DR Action Plan. Per the Action Plan, these include construction, tourism and hospitality, healthcare, technology, manufacturing, and "other unidentified workforce training needs to support Puerto Rico's long-term recovery goals," See the US Department of Labor Employment and Training Administration's "WIOA Overview" at https://www.dol.gov/agencies/eta/wioa/about and Action Plan Amendment Three as certified by the Oversight Board, 2020.

To empower more students and employers to benefit from co-ops and internships, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 46: REQUIRED IMPLEMENTATION ACTIONS FOR CO-OP AND INTERNSHIP PROGRAMS

Action item	Owner	Deadline
 Establish a working group comprised of DOLHR, local universities (including UPR), IPR, the WDPO, and DDEC 	• DDEC	- June 30, 2022
Design experiential learning guidelines for employers to promote high-quality co-ops and internships	Working group	 August 15, 2022
 Design outreach strategy to identify mable experiential feaming employers from high-growth industries identified through two-stage tabor market analysis 	Working group	 August 15, 2022
 Define criteria for subsidizing co-op expenses for qualified employers or internship living expenses for high-achieving students 	• DDEC	 September 30, 202
Share guidelines, outreach strategy, and subsidy criteria with Oversight Board	• DDEC	 September 30, 202
Discuss guidelines, outreach strategy, and subsidy criteria with Oversight Board	• DDEC	October 15, 2022
 Submit funding proposal requesting CDBG-DR funds under terms set forth in the CDBG-DR Action Plan 	■ DDEC	 October 31, 2022
 Update SPWD and WIOA State Plan with guidelines, outreach strategy, and subsidy criteria 	• DDEC	 October 31, 2022
Launch employer outreach campaign	• TBD	 Annually from November 1, 2022
 Identify opportunities to introduce co-op opportunities for select college majors across universities 	 Working group 	 March 15, 2023
 Discuss results of initial employer outreach campaign and co-op expansion initiative with Oversight Board 	• DDEC	 March 30, 2023
Implement new co-op requirements	 Universities 	 August 2023
Update SPWD with experiential learning program results	• DDEC	Annually from October 15, 2023

Meanwhile, research opportunities can help draw students into STEM fields and foster the development of skillsets sought by STEM-centric employers, but financial and administrative barriers prevent many college students from enjoying these opportunities. Academic research empowers STEM students to familiarize themselves with their field of study, helps facilitate students' entry, specialization, and success in STEM, and plays an important role in the development of industrial innovation centers (e.g. Silicon Valley).⁶⁷ However, it can be difficult to partake in due to limited research funding (especially from the Commonwealth) and stringent administrative rules (e.g., requiring professors to teach the same number of courses when conducting research as when they are not).⁶⁸

To boost the number of students and employers that can benefit from research opportunities, the Government must accomplish the following action items by their respective deadlines:

⁶⁷ Madan and Teitge, "The Benefits of Undergraduate Research: The Student's Perspective," 2013.

⁶⁸ Speaking to the financial barrier, UPR's guide on identifying external funding sources does not include any grants sponsored by the Puerto Rican Government; see University of Puerto Rico, "Are you a researcher? External funding sources," 2020.

EXHIBIT 47: REQUIRED IMPLEMENTATION ACTIONS FOR COLLEGIATE-LEVEL ACADEMIC RESEARCH

Action item	Owner	Deadhne
Establish a working group comprised of local universities (including UPR), local professors, and DDEC	• DDEC	 December 15, 2022
• Develop a strategy to reduce administrative barriers to collegiate academic research ¹ and design a STEM research fund ²	Working group	 February 28, 2023
Define criteria and determine adjudicators to review and award grants	Working group	 February 28, 2023
Update strategy with input from leading mainland research universities and share with the Oversight Board	 Warking group 	 April 15, 2023
Discuss strategy and projected research fund costs with the Oversight Board	• DDEC	 April 30, 2023
Identify public and social sector partners to help subsidize costs associated with research that aligns with their talent needs $^{\sharp}$	DDEC, WDPO	 May 31, 2023
Update SPWD with administrative strategy and research fund design	- DDEC	- June 15 2023
Implement administrative changes in line with updated SPWD	Local universities	 July 31, 2023
Launch research fund	• DDEC	 August 1, 2023
Update SPWD with collegiate research program results	• DDEC	 Annually from July 15, 2024

Create training programs tailored to employer needs

Offering mid-career workers robust opportunities to sharpen their skillsets or develop new ones altogether would better empower workers to meaningfully participate in the formal economy. To create such opportunities, the Government must expand high-quality apprenticeship offerings and introduce customizable workforce development programs that provide employers reliable access to workers trained to meet mitigate specific talent gaps.

Apprenticeships empower workers to develop highly-specialized skillsets that benefit apprentices and employers alike, but opportunities are scare on the Island. Apprenticeships combine several years of paid on-the-job learning with classroom instruction, are registered with the US Department of Labor Apprenticeship Office (DOL-AO), and issue an industry-recognized Certificate of Completion upon satisfactory completion. While they have been linked to higher lifetime earnings and productivity among apprentices and reduced employee turnover and positive returns on investment for employers, they are offered by few employers due to limited Government promotional efforts. ^{69,70}

A study of apprenticeships in 10 mainland states found that apprentices earned more than \$240,000 in total lifetime earnings on average than those who did not complete apprenticeships; see Reed, et. al., "An Effective Assessment and Cost-Benefit analysis of Registered Apprenticeship in 10 States," 2012. For additional findings on the positive benefits of apprentices for employers, see Lerman, et.al., "The Benefits and Challenges of Registered Apprenticeship: The Sponsors' Perspective," 2009; Lerman, "Apprenticeship in the United states: Patterns of Governance and Recent Developments," in Schlogl, ed. Situated Competence Development Through Innovative Apprenticeships, 2008. Regarding returns on investment, a study of more than 1,000 Canadian employers found that companies derived \$1.47 in benefits for every dollar invested in apprenticeship training; see Canadian Apprenticeship Forum, "It pays to hire an apprentice: Calculating the return on training and investment for skilled trades employers in Canada," 2009.

⁷⁰ In 2018, DDEC and DOLHR launched an initiative to develop construction, tourism, aerospace, agriculture, and advanced manufacturing apprenticeships. Since then, the effort has only successfully engaged a handful employers (primarily aerospace firms) to create programs. Despite their importance, the initiative has not created any construction- or tourism-focused apprenticeships; see Action Plan Amendment Three as certified by the Oversight Board, 2020, and El Vocero, "Arranca Programa de Formacion para el Empleo del DDEC," 2018.

The Government should seek to leverage WIOA and CDBG-DR funds to fund the development of more robust apprenticeship programs.⁷⁴

To enable additional residents and companies to benefit from apprenticeships, the Government must accomplish the following action items by their respective deadlines:

48: REQUIRED IMPLEMENTATION ACTIONS FOR APPRENTICESHIP

	Action dem	Dwnet	Deadins
	 Establish a working group composed of DOLHR, local technical colleges, the WDPO, and DDEC 	• DDEC	 March 31, 2021
	 Assess performance of DDEC-managed apprenticeship programs and share findings with Oversight. Board 	Working group	 May 31, 2021
	Discuss apprenticeship performance with Oversight Board	• DDEC	 June 15, 2021
; ; ; ;	 Design strategy to (1) address current apprenticeship shortfalls, (2) address talent gaps identified through two-stage labor market analysis, (3) promote DOL-AO- compliant apprenticeships to employers, and (4) enable local colleges to create programs that meet employer specifications? 	Working Group	 October 31, 2021
	 Determine basis and define criteria for subsidizing apprenticeship costs for qualified employers 	• DDEC	 November 30, 2021
	Share strategy and subsidy criteria with Oversight Board	• DDEC	 November 30, 2021
	Discuss strategy and subsidy criteria with Oversight Board	- DDEC	 December 15, 2021
	 Submit funding proposal requesting CDBG-DR funds under terms set forth in the CDBG-DR Action Plan 	• DDEC	 January 30, 2022
	Update SPWD and WIOA State Plan with apprenticeship strategy and subsidy criteria	• DDEC	 January 30, 2022
	Launch employer outreach campaign	• TBN	 Annually from July 15, 2022.
	Update SPWD with apprenticeship program results	• DDEC	Annually from September 15, 202

Meanwhile, many business-friendly states offer employers access to integrated workforce development programs that train employees to company specifications, but Puerto Rico lacks such a program. Customizable worker training programs offer on-the-job training through partnerships with local educational institutions to train workers to meet employers' specific needs at no cost. They are used to incentivize investments in many business-friendly states on the mainland, but do not exist in Puerto Rico currently.⁷²

The Government should seek to create these and may be able to leverage WIOA and CDBG-DR funds to defray the associated costs.⁷³

⁷¹ Federal WIOA guidelines explicitly allocate funding for apprenticeship programs. Moreover, DDEC is permitted to submit funding proposals for co-op and Internship programs that support key industries under the terms of the CDBG-DR Action Plan. Per the Action Plan, these Industries include construction, tourism and hospitality, healthcare, technology, manufacturing, and "other unidentified workforce training needs to support Puerto Rico's long-term recovery goals." See the US Department of Labor Employment and Training Administration's "WIOA Overview" at https://www.dol.gov/agencies/eta/wioa/about and Action Plan Amendment Three as certified by the Oversight Board, 2020.

⁷² Site Selection and Area Development, the mainland's leading site selection magazines, both ranked Georgla the top state for doing business in 2019, thanks in part to its Quick Start program. To draw investments into their states, South Carolina, Louisiana, and Alabama have also implemented top-ranked no-cost customizable workforce development programs (ReadySC, LED FastStart, and AIDT, respectively). Like Georgia, these three states also gamered top-10 business-friendly rankings from both Site Selection and Area Development in 2019.

⁷³ The Government could potentially leverage WIOA funds earmarked for adult and dislocated worker training programs if that program serves significant numbers of low-income, unemployed, or dislocated workers. Additionally, DDEC is permitted to submit funding proposals for workforce development programs that support key industries under the terms of the CDBG-DR Action Plan. See the US Department of Labor Employment and Training Administration's "WIOA Overview" at https://www.dol.gov/agencies/eta/wioa/about and Action Plan Amendment Three as certified by the Oversight Board, 2020.

To create a highly-competitive customizable worker training system, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 49: REQUIRED IMPLEMENTATION ACTIONS FOR CUSTOMIZABLE WORKER TRAINING PROGRAMS

Action Item	Owner	Deadline
 Establish a working group comprised of DOLHR. Vivienda, local technical colleges, IPR, the WDPO, and DDEC 	• DOEC	 August 31, 2021
 Design customizable pilot program that (1) helps qualified employers¹ (2) identify talent needs. (3) screen candidates, and (4) design tailored worker trainings at no cost² 	 Working group 	 March 31, 2022
 Discuss pilot program design and eligibility criteria with Oversight Board 	ODEC, Vivienda	 April 30, 2022
 Submit funding proposal requesting CDBG-DR funds under terms set forth in the CDBG-DR Action Plan 	• DDEC	 May 15, 2022
 Update SPWD and WIOA State Plan with pilot design, eligibility criteria, and roadmap to expand beyond pilot 	- DDEC	 May 15, 2022
Launch pilot program	 DDEC, Vivienda 	 July 1 2022
Begin broadening customizable workforce development initiative beyond pilot program	 DDEC, Vivienda 	 Ongoing from July 2023
 Update SPWD with pilot program results 	 DDEC. Vivienda 	 August 15, 2023
 Update investment promotion strategy to leverage customizable program and share with Oversight Board 	• IPR	 September 30, 202
Discuss opdated investment promotion strategy with Oversight Board	- IPR	 October 15, 2023
 Update SPWD with customizable workforce development program results 	• DDEC	 Annually from August 15, 2024

^{1.} To quality for RepdySC, the program regures that 11the number in table projection for an employer must be permated, (2) pay represent a conjective, wage for the boatsies, (3) uses the number of pite program was reported and the property of the project of the

Subsidize training programs to support lifelong learning

Government subsidies to support the life-long education of residents will help employers meet evolving talent needs. For example, in Singapore, such a credit was implemented, offering every citizen 25 and older up to USD \$1,100 to subsidize their technical reskilling or specialization.⁷⁴ Such a program could help address the Island's talent gaps and ensure that residents can remain competitive as companies' human capital needs shift over time.

The Government could potentially leverage WIOA and CDBG-DR funds to help defray expenses associated with a lifelong learning credit.⁷⁵

To support lifelong education, the Government must accomplish the following action items by their respective deadlines:

⁷⁴ Reskilling and specialization can be achieved through enrollment in structured career transition programs managed by local colleges and universities or through pre-approved technical education courses (including online courses); for more information, see SkillsFuture, "What is it?"

⁷⁵ To leverage WiOA funds, the program must provide job-seekers access to industry-recognized credentials for in-demand jobs. Additionally, DDEC is permitted to submit funding proposals for programs that would provide unemployed or underemployed residents training in skill areas relevant to key industries under the terms of the CDBG-DR Action Plan, See the US Department of Labor Employment and Training Administration's "WiOA Overview" at https://www.dol.gov/agencies/eta/wioa/about and Action Plan Amendment Three as certified by the Oversight Board, 2020.

EXHIBIT 50: REQUIRED IMPLEMENTATION ACTIONS FOR LIFELONG LEARNING INITIATIVE

Actionitem	Owner	Deadline
Establish a working group comprised of local universities (including UPR), the WDPO, and DDEC	• DDEC	 September 30, 2022
Design pilot program that enables adults to access technical education courses to address talent gaps identified through the two-stage labor market analysis*	Working group	 March 31, 2023
Define criteria for identifying and subsidizing courses	- DDEC	 April 15, 2023
Share design and subsidy criteria with Oversight Board	• DDEC	 April 15, 2023
Discuss dasign and subsidy criteria with Oversight Board	• DDEC	 April 30, 2023
Submit funding proposal requesting CDBG-DR funds under terms set forth in the CDBG-DR Action Plan	• DDEC	 May 15, 2023
Identify private partners to help subsidize lifelong learning courses that align with their talent needs ²	DDEC, WDPO	 Ongoing from May 31, 2023
Update SPWD with pilot program design and roadmap to expand beyond pilot program	• ODEC	- June 15, 2023
Launch pilot program	DDEC, universities	■ July 1, 2023
Begin broadening lifelong learning initiative beyond pilot program	 DDEC, universities 	 Ongoing from July 1 2024
Update SPWD with pilot program results	• DDEC	 August 15, 2024
Update SPWD with lifelong learning program results	- DDEC	 Ongoing from August 15, 2025

^{1.} As part of this design process the working group should, it is notificated and strategies and

Chapter 9. K-12 education reform

A high-quality education is the linchpin for social mobility for the residents of Puerto Rico—especially after years of devastating natural disasters and the COVID-19 crisis. Comprehensive K-12 education reforms will empower every Puerto Rican to develop the skillsets needed to achieve economic self-sufficiency and join the formal workforce. Together with Section 13.3, which outlines the necessary management improvements and operational efficiencies that the Department of Education (PRDE) must pursue, this chapter provides a transformation roadmap that will truly change K-12 student outcomes on the Island, and therefore enable greater workforce participation and productivity.

Studies show that mainland workers that attain fluency in both English and Spanish earn \$2,800 more per year than their monolingual peers, and that a one-quarter standard deviation in school quality across US states would produce an average 0.35% long-run growth rate uptick. 76,77 In addition, Puerto Rican workers (ages 65 or below) with a high school diploma earn three times as much as residents who lack one. 78 Indeed, improvements in education will bring prosperity and growth to individuals and the Island as a whole.

Meanwhile, more than 290,000 children rely on PRDE to serve as their primary vehicle for social mobility. Three years have passed since the certification of the first Fiscal Plan for Puerto

programming impact, and delivery mechanisms.

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⁷⁶ Rumbaut, "English Plus: Exploring the Socioeconomic Benefits of Bilingualism in Southern California," 2014.

⁷⁷ As measured by OECD PISA exam scores; see Hanushek, et. al., "The Economic Benefit of Educational Reform in the European Union," 2012; National Bureau of Economic Research, "Economic Gains for US States from Educational Reform," 2015.

⁷⁸ Ruggles, et. al., IPUMS USA; Version 9.0 [Puerto Rico Community Survey], 2015; \$17,348 vs \$5,731

Rico, yet PRDE continues to delay the comprehensive reforms necessary to meet the developmental needs of all children and prepare every student for success in higher education or the workforce. PRDE has allowed school underperformance to persist, with just 45% of students proficient in Spanish, 39% in English, and 30% in mathematics in 2019, and with particularly sharp drops in English between third and fourth grade and in mathematics and Spanish proficiency between fifth and sixth grade. PRDE has left 33% of third graders atrisk of not graduating high school and delayed the introduction of evidence-based practices that are important to properly serve Special Education students (who comprise a greater share of the student population—32%— than in any other US jurisdiction). 80,81

Although natural disasters and the COVID-19 pandemic have wrought substantial destruction, relief funds in response to these events offer PRDE an unprecedented opportunity to reshape Puerto Rico's public schools for the better. In the aftermath of the 2017 hurricanes, PRDE was awarded \$589 million in Immediate Aid to Restart School Operations (RESTART) funds to offset expenses associated with reopening schools. As discussed in *Section 13.3*, PRDE will now receive over \$349 million under the CARES Act as well.⁸² Finally, the Oversight Board allocated \$124 million in additional Commonwealth funds to purchase tablets, software, and training services necessary to support distance learning for all PRDE students and teachers as part of the Emergency Measures Support Package in response to the COVID-19 emergency.

Figure 19. Figure 1

⁸⁰ This calculation is based on recent PRDE performance data and accounts for the fact that students who do not read at grade level by third grade are four times likelier to not graduate high school; see Puerto Rico Department of Education, "Reporte de Desercion Escolar 2018-19," 2019 and Hernandez, "Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation," 2012.

An average of 13% of students are characterized as special education students on the mainland; see Puerto Rico Department of Education, "Matricula Activa," 2020; US Department of Education, National Center for Education Statistics, 2017.

⁸² Among other uses, CARES funds can support (1) purchasing educational technologies (e.g. hardware, software, and connectivity), (2) mental health services, and (3) and planning for long-term school closures (e.g. how to provide meals to eligible students).

Investing in student outcomes

The Oversight Board believes deeply in the importance of a high-quality public-school system for the children of Puerto Rico. While improving the quality of schools and student outcomes will take real transformation on the part of the Department of Education, the Fiscal Plan includes funds to cover particular programs that will enable the Department to improve student outcomes. These investments are outlined below.

- Distance learning (~\$254 million): The Fiscal Plan includes emergency funding to enable the purchase of tablets, software, and training services necessary to support distance learning for all PRDE students and teachers as part of the Emergency Measures Support Package issued in response to the COVID-19 emergency. The Fiscal Plan expects PRDE to use these funds to provide online education offerings as quickly as possible
- English Language Learning teacher development program (~\$1.5 million): Beginning with the 2020-2021 school year, the Department of Education will partner with a national non-profit organization to identify, recruit, and train ELL teachers across Puerto Rico, at the recommendation of the Oversight Board. The Oversight Board suggested this partnership recognizing the important impact that bilingual education has on students, driving lower child and adult poverty while also expanding professional opportunities. In order to fund this project, PRDE and the non-profit organization will apply for a competitive federal grant. This grant will potentially cover the costs associated with the non-profit organization for the initial three years, after which the training program will be fully implemented and PRDE will have built the internal capacity and resources to scale the program over the long term. During the first three years alone, the program will train approximately 300 English teachers, with an expected impact on nearly 90,000 students.
- Plan provides the budget to fund the hiring of one in-house psychologist per PRDE school to help the Department better meet the social-emotional and developmental needs of all students, beginning with the 2020-2021 school year. Specifically, the Oversight Board will allocate \$52 million to hire 856 school psychologists that will join the Department as full-time employees. Their objectives are two-fold: on the one hand, school psychologists will provide early interventions (e.g. behavioral screenings) to connect students with appropriate resources and ensure that children are not erroneously classified as Special Education students. Additionally, school psychologists will ensure that Special Education students receive adequate academic and behavioral support as required by their IEP—reducing the number of students who enter Remedio Provisional.
- Innovation in education (~\$7 million): To encourage schools to explore new ways of learning, the Fiscal Plan includes a potential \$100,000 reward for 10 schools per region to implement an education innovation project during the second semester.
- Incentives to improve school performance and reporting (~\$2 million): Making real progress on reform in the Department of Education will start with being able to monitor, measure, and report data better. The Fiscal Plan thus includes \$2 million in funds as an incentive (potential \$1,500 one-time bonus) for school directors that perform well on scorecards based on data captured and approved methodology to measure outcomes.

To afford all Puerto Ricans an equal opportunity to develop the knowledge and skillsets needed to contribute to the Puerto Rican economy, PRDE must begin implementing education reforms in FY2021. As described in its State Plan, PRDE aims to achieve 73% student proficiency in mathematics, 77% proficiency in English, and 80% proficiency in Spanish across all grade levels by the 2021-22 school year. These targets are extremely ambitious given current student performance—in mathematics alone, reaching this target would require doubling the average student proficiency in only a matter of years (currently 30%). Nonetheless, the future of Puerto Rico relies on PRDE delivering this level of

improvement. To achieve these targets—and ensure that PRDE makes a concerted effort to offer the children of Puerto Rico the high-quality education that they deserve—comprehensive reforms must begin immediately, particularly in areas such as English Language Learning (ELL), K-5 literacy, and STEM instruction.

To maximize the likelihood of success, education reforms should build on the improvement areas PRDE identified in 2017: increased student achievement (as measured by META-PR scores and graduation rates), stronger professional development for directors and teachers, and more efforts to support the developmental needs of the whole child.⁸³ As such, the Government's overhaul must:

- Define goals and design PRDE's 2022-27 strategic plan to guide reforms
- Launch evidence-based curriculum reforms
- Create a post-COVID-19 back-to-school plan and stand up distance learning capabilities
- Improve professional development opportunities for directors and teachers
- Make targeted investments to boost family engagement
- Systematically collect, manage, and leverage data for better decision-making

These reforms must collectively aim to strengthen system-wide accountability among educators and administrators; facilitate data-driven leadership at the central, regional, and school level; and increase PRDE's responsiveness to the needs of the whole child and the broader community on the Island. Moreover, the Oversight Board welcomes PRDE, its non-Government partners, and other Government agencies to design and propose further innovative reforms to strengthen PRDE schools.

9.1 Identify goals and design a strategic plan to guide reforms

Successful education reforms require a strategic and operational foundation to succeed. Before PRDE can transform the Island's schools, it should understand how student needs (e.g. curricular resources, developmental opportunities) vary across schools, and segment all schools into "achievement tiers." Then, for each achievement tier, PRDE must define improvement goals and strategies to realize them within a 2022-27 strategic plan. PRDE must also create a Chief Operating Officer (COO) function to lead the PRDE Central Office and oversee the day-to-day implementation of reforms. To complement these efforts, the Department must strengthen financial management capabilities within the existing CFO's office.

9.1.1 Specific initiatives and design parameters

The 2020 Fiscal Plan requires that PRDE execute the following actions to establish a foundation for education reforms:

- Segment all schools by student outcomes (as illustrated in Exhibit 51)
- Develop a 2022-2027 strategic plan to define KPIs, improvement targets, and
 milestones for each achievement tier to gauge the effectiveness of education reform efforts
 in real time, codify an operational model that clearly delineates central, regional, and local

⁸³ The fourth improvement area—right-sizing schools to optimize resources, improve responsiveness, and strengthen regional and local management—is addressed in Section 13.3.

administrators' responsibilities around the implementation of education reforms, and identify strategies for central, regional, and local administrators to implement differentiated interventions across all achievement tiers⁸⁴

EXHIBIT 51: PROPOSED OUTCOME-BASED PRDE SCHOOL SEGMENTATION

11-4	 All schools that qualify for School Improvement resources¹
Underperforming schools	 Schools that average less than 50% student proficiency across all four META-PR exams
Fair-performing schools	 Schools that average 50% to 75% student proficiency across all four META-PR exams
Well-performing schools	 Schools that average more than 75% student proficiency across all four META-PR exams

All elementary (K-5), middle (6-8), and high (9-12) should be segmented, with schools spanning two or more categories (e.g. a K-8) segmented two or more ways

*PCC already segments approximately 125 of its inost-underperforming schools using "composite acones" (inside up tactors the INETA-PR, student proficiency as inside the "School progressing support schools include as a school progressing support schools include as a school with a season support school progressing support schools with a season support school progressing support schoo

To establish the firm foundation required to implement education reforms, PRDE's Central Office must accomplish the following actions by their respective deadlines. Implementation of the PRDE efficiency measures stipulated in *Section 13.3*, which will promote the more effective management and use of Departmental resources, will further strengthen education reform efforts' likelihood of success.

KPIs measure a unit of performance (e.g. percentage of third-graders deemed proficient by META-PR exams), targets define an objective (e.g. 50% third-grade mathematics proficiency within three years), and milestones provide regular markers of performance (e.g. 30% third-grade proficiency in mathematics in year one).

EXHIBIT 52: REQUIRED IMPLEMENTATION ACTIONS TO ESTABLISH ENABLERS FOR EDUCATION REFORM

	Action Item	Deadline
	Launch search for a COO	- July 1, 2020
	Segment all PRDE schools	 Start of 2020-21 school year
	 Define KPIs, targets, and milestones for each achievement tier to evaluate the impact of education reforms and share them with the Oversight Board 	 September 30, 2020
	Discuss KPIs, targets, and milestones with the Oversight Board	 October 15, 2020
	 Discuss progress made in the development of a preliminary 2022-27 strategic plan with the Oversight Board (check-in#1) 	 November 30, 2020
1	Identify a COO	 December 15, 2020
ı	 Discuss progress made in the development of a preliminary 2022-27 strategic plan with the Oversight Board (check-in#2) 	 January 15, 2021
	 Share a preliminary 2022-27 strategic plan with (1) professional development, (2) curricular and distance learning, (3) family engagement, (4) data-driven, and (5) other viable reforms for each achievement tier with the Oversight Board (check-in#3) 	 February 15, 2021
	Discuss preliminary strategic plan draft and projected costs with Oversight Board	 February 28, 2021
	Finalize strategic plan and share with Oversight Board	 March 31, 2021
	Discuss finalized strategic plan and projected costs with Oversight Board	 April 15, 2021
	Publish annual reform implementation progress report	 Annually from June 30, 2022
	Implement 2022-27 strategic plan	- July 1, 2021
	Discuss annual implementation progress report with Oversight Board	 Annually from August 15, 2022

I ⇒ particular, PRDE, should focus on (1) strangthening budget oversight and forecasting capabibles. (2) integrating ERF, and tHRES, systems to improve Than data and personnel instrugement is specially be a system of the procurement of the to reduce that and waste and improve category purposes a stategard. (4) identifying top-19 contracts to analyze to dentify and encounter to a final most to a state of the procurement of the

9.2 Launch evidence-based curriculum reforms

PRDE must overhaul its curriculum and leverage supplemental learning opportunities, especially digital aids, to achieve significant increases in student proficiency. PRDE's curriculum is in need of end-to-end standardization around evidence-based best practices while also preserving the flexibility for educators to meet the diverse learning needs of all students and address requirements within Special Education students' IEPs. Finally, PRDE's curriculum must integrate digital aids that facilitate the high-quality education of Puerto Rico's children and guard against schooling disruptions.

9.2.1 Specific initiatives and design parameters

The Certified Fiscal Plan requires that PRDE execute the following actions to strengthen its curriculum:

- Assess the impact of current curricular spend on student performance to direct resources to evidence-based curriculum and instructional strategies across subjects and grade levels to benefit the greatest number of General and Special Education students while still providing all additional supports required by Special Education students' IEPs, design a new curriculum to address the areas of most-significant academic and developmental underperformance across the PRDE system, and determine when to purchase updated or specialized curricular materials (e.g. textbooks) to better support General and Special Education students.
- Implement innovative learning strategies to empower students through curricular innovations being used in peer systems such as project-based learning (PBL). These approaches aim to build foundational problem-solving skills (e.g. synthesis, analysis) through a "real world" application conducive to long-term information retention, and

empower all educators—through the use of formative assessments (e.g. reviews of student notes, weekly quizzes, student-teacher feedback sessions)—to boost student achievement, quality of work, information retention, and attendance.^{85,86}

 Bolster learning strategies with proven digital aids to equip educators with learning resources (e.g. lessons, assessments) and other curricular materials tailored to each student's developmental needs that boost student performance and enable schools by virtually connecting students with qualified instructors—to improve the quality of student instruction and boost student performance.^{87,88}

9.2.2 Current state and path forward

PRDE's current curriculum does not adequately support the academic and developmental needs of all General and Special Education students, and many teachers lack the pedagogical strategies needed to maximize student performance with current curricular resources. The Department lacks a sense for how its curricular spend translates into student impact, preventing PRDE from reallocating resources to maximize performance. Likewise, PRDE has not yet implemented innovative teaching strategies—such as project-based learning—across all schools, further inhibiting student performance.

Despite years of interrupted schooling, PRDE has inadequately planned for the virtual education of its students even though federal and Commonwealth funding has eliminated major barriers to digital education within and outside of PRDE schools. All schools have wired internet access and will have wireless internet by the end of 2021, but PRDE has not yet identified beneficial digital aids to enhance student performance inside schools. ⁸⁹ Launching a robust distance learning capability, as outlined below, will be a core enabler to curricular reform.

While the Oversight Board encourages the Department to select interventions that align most-closely with its 2022-27 strategic plan, PRDE must accomplish the action items outlined in *Exhibit 53* by their respective deadlines.

Unlike traditional learning environments (which evaluate learning at a unit's end), PBL emphasizes ongoing learning and evidence-based argumentation. Studies spanning more than 40 years have linked PBL to stronger long-term information retention, skill development, and student and teacher satisfaction than traditional educational approaches; see Strobel, et. al., "When is PBL more effective? A meta-synthesis of meta-analyses comparing PBL to conventional classrooms," 2009.

Formative assessments have been linked to gains in student achievement, with especially strong results among previously underperforming learners, as well as higher quality student work, better student attendance, and increased retention. See Bakula, "The Benefits of Formative Assessments for Teaching and Learning," 2010, and Hanover Research, "The Impact of Formative Assessment and Learning Intentions on Student Achievement," 2014.

Miami-Dade County Public Schools (FL) piloted Voxy, an English-learning software with adaptive learning capabilities, to strengthen ESL instruction. Students with one semester of exposure to the program improved an average of 15% on the Language Proficiency Assessment, while their non-Voxy peers only averaged a 3.5% improvement.

⁸⁸ For example, in Uruguay, a nationwide initiative used laptops that had previously been distributed to elementary schoolers to improve ELL instruction, driving meaningful improvements in participants' reading and writing scores

Wireless initiatives have been funded through a combination of Federal E-Rate and RESTART funds. The Federal Communications Commission's E-Rate program offers eligible schools and libraries discounted telecommunications products and services, including internet connections, on the basis of local poverty levels; see Federal Communications Commission, "E-Rate: Universal Service Program for Schools and Libraries," 2020.

Action item	Deadline	FY2021 hudget incentives	
 PRDE to faunch a school competition for education innovation and create an application process for school leaders that have ideas to positively impact student achievement through innovative programs or practices 	December 2020	 \$100,000 reward for 10 schools per region to implement the education innovation project during the second semester 	
 Design curricular reform to complement distance learning strategy and leverage (1) student performance assessments (2) innovative learning strategies and (3) provan digital aids, and (4) other viable interventions to strengthen PRDE's curriculum at each achievement tier as part of the preliminary strategic plan. 	• February 15, 2021		
Finalize updates to curricular reforms as part of the updated strategic plan	 March 15, 2021 		
 Update curricular reform section within annual reform implementation progress report 	 Annually from July 31, 2022 		

9.3 Create a post-COVID-19 back-to-school plan and stand up distance learning capabilities

While implementing evidence-based reforms is an important near-term goal, the most immediate priority for PRDE must be to develop a plan for students in the 2020-2021 school year in the context of the COVID-19 pandemic. This planning process must include a comprehensive distance learning strategy and a path to reopen schools when safe for teachers and students. It is critical for PRDE to begin this work immediately so that the strategy can be implemented in advance of the new school year in the fall of 2020, though such innovations will also support instruction in future years as well.

9.3.1 Specific initiatives and design parameters

In order to effectively deal with these challenges and respond in an urgent manner, PRDE must create a task force that is solely focused on school re-opening and distance learning:

Back-to-school planning must combine public health guidance, PRDE management expertise, stakeholder input, and research on national and international back-to-school approaches in order to develop the right plan for Puerto Rico. Nearly every school system in the world is currently navigating this exact challenge—and Puerto Rico can learn from the successes and failures of others. In addition to creating the right plan, PRDE will also have to effectively implement it. The impact of the COVID-19 pandemic on top of the 2017 hurricanes and 2020 earthquakes, will require new safety measures on top of accelerated learning strategies, scheduling modifications, and greater support for students and educators. A thorough response could also include relatively straightforward elements like procuring additional cleaning supplies and better protective equipment for staff that still may take several months to coordinate.

Most states and districts are considering three broad scenarios for returning to school in the 2020-2021 school year:

- Scenario 1: Schools use online/remote learning platforms for the beginning of the school year while physical schools remain closed
- Scenario 2: Schools re-open for in-person instruction while implementing social distancing protocols

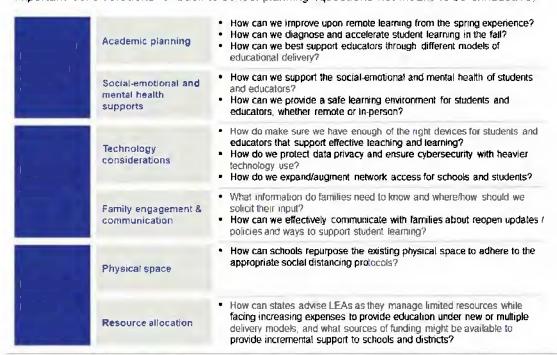
 Scenario 3: Schools employ a hybrid model using modified schedules to meet social distancing protocols, while off-schedule time is coordinated remotely

PRDE must be prepared to provide guidance to schools on how to choose among these scenarios as well as navigate among them in the case of new outbreaks of the virus. For this last reason, PRDE needs a learning strategy that flexes across delivery channels with limited to no disruption.

Some of the topics to be addressed in this scenario planning effort are identified in Exhibit 54.

EXHIBIT 54: CONSIDERATIONS FOR BACK TO SCHOOL PLANNING

Important considerations for back to school planning (questions not meant to be exhaustive)



Distance learning strategies are no longer an optional component of a school system's education model. Given the amount of out-of-school time in Puerto Rico over the past several years, the Department must make meaningful progress in developing distance learning strategies. Going forward, it should be anticipated that distance learning may need to be accessed on a moment's notice and could even be the default delivery model for the fall of 2020. PRDE's distance learning plan should include strategies to support instructional delivery (e.g., adaptive curriculum), vulnerable populations, professional development mechanisms for teachers, technology deployment (and supporting technology platforms—e.g., a learning management system), etc. PRDE has begun to procure thousands of devices for students and teachers to address technology gaps, but the deployment of these devices alone does not constitute a learning strategy. Rather, careful planning will be required to effectively distribute the devices and use them effectively to support student learning. As with back-to-school planning, PRDE should seek to leverage strategies that have proven successful in other places, focusing on identifying and delivering high-quality instruction with appropriate professional supports for teachers.

Funding for a task force to take on these initiatives should come from the various funding sources mentioned above. For example, these kinds of planning efforts are an allowable expense under federal funding from the CARES Act. *Exhibit 55* describes some of the key

implementation actions that are critical to effective back-to-school planning and the development of effective distance learning strategies.

EXHIBIT 55: BACK-TO-SCHOOL AND DISTANCE LEARNING IMPLEMENTATION ACTIONS

Required implementation action	Deadline
Develop plans and protocols to deliver remote instruction, and support parents and teachers through remainder of 2019-20 school year	June 2020
 Assess which portions of the curriculum will be areas of focus during remote learning period balancing accessibility and equity 	
 Rapidly provide Professional Development and platform for digital community/connection as educators seek to exchange ideas and best practices for remote instruction 	
 Assess summer scenarios by exploring options to provide ongoing learning opportunities and/or programming for students during summer months 	
 Reflect on what worked this spring, challenges, and emerging best practices to develop a plan to strength instructional delivery (regardless of setting) 	August 2020
 Provide new professional development for educators that reflects the now-different demands of their jobs, and the likely need for flexible instructional tactics going forward 	
 Engage in scenario planning for fall instruction (various delivery channels, adjusted curriculum), and plan for altered curriculum and schedules for fall 	
 Develop plan to assess impact of COVID-related school closures on student learning and progress 	
Assess impact of remote learning and remediate lost learning time by doubling down on English, Spanish, Science and math	December 2020
 Offer additional mental health services and social-emotional supports for students, who will have had a wide variety of at-home experiences over the last 6 months 	
 Create specific plans, pathways, and supports for students in key transition grades to ensure that they have the supports necessary to be successful without having completed the prior grade in-person 	
Provide educators with ongoing support and professional practice opportunities to improve regardless of delivery channel	
 Identify gaps in IT systems and infrastructure to enable seamless online learning and teaching experience 	June 2020
 Define criteria for selection of technology vendors, including long-term viability, scalability of platform, and data security among others 	
Distribute devices and support students' and educators' hardware and connectivity needs as they transition to remote learning	July/August 2020
 Coordinate with Academics team and educators to reflect on best practices in remote learning environments, and streamline technology to support better integration of education delivery and instructional strategies 	
 Evaluate effectiveness of technology tools and platforms, and improve processes underpinning remote operations (e.g., systems to connect administration and learning, devices and training) 	
 Develop more comprehensive asset management strategy, including asset inventory reviews, to support remote learning 	
 Assess security, bandwidth and resiliency of current IT infrastructure and invest to shore up gaps identified 	December 202
 Review and after cybersecurity processes and protocols to reflect changes in technology infrastructure and use 	
 Invest in online learning infrastructure to ensure resiliency of remote learning environment 	
 Identify opportunities improve efficiency and security of technology portfolio, infrastructure, and operating model 	

PRDE will need to invest significantly in its back-to-school planning and distance learning strategies, though it must also continue to address the structural challenges within the system that are aligned to the Fiscal Plan categories. While savings measures have been deferred for

one year, PRDE must continue its organizational transformation and efforts to operate a more effective and efficient system.

9.4 Improve professional development opportunities for directors and teachers

PRDE must strengthen longer-term professional development for teachers and directors to improve classroom instruction and school management. Effective teachers are better equipped to develop strong lesson plans, understand their curricula, and support their students. Similarly, school directors are better equipped to improve school operations, implement reforms, and oversee the development of teachers when they receive robust training on how to do so.

9.4.1 Specific initiatives and design parameters

The Certified Fiscal Plan requires that PRDE adhere to a set of parameters when implementing this reform. Specifically, PRDE must:

- Define operational and results-based criteria that will provide the Central Office additional input in identifying the top-performing directors and teachers across PRDE, enabling PRDE to broaden mentorship opportunities that introduce underperforming educators to best practices (e.g., by reducing top-performers' workloads to leverage them as formal mentors trained via the University of Puerto Rico-PRDE partnership; hiring jobembedded coaches to serve as full-time mentors), and offering evaluators across PRDE schools (e.g. superintendents, gerentes escolares, facilitators) a clear structure against which to offer directors and teachers performance-based feedback.
- Formalize learning walks and communities of practice across PRDE schools to expose teachers and directors to instructional, administrative, and social-developmental best practices (e.g., by requiring every teacher to participate in a learning walk that addresses an area of underperformance among their students, piloting the use of job-embedded professional development coaches), and strengthen ELL, K-5 literacy, and STEM instruction (especially K-5 mathematics) through robust mentorship (e.g. all low-performing teachers could be assigned a high-performing mentor to help them develop their strengths and address weaknesses). 91,92
- Fully leverage the K-12 teacher training partnership between the University of Puerto Rico (UPR) and PRDE—made possible by a \$10 million annual Commonwealth payment to the university—to subsidize teacher certification and training in core subjects (e.g. English, mathematics, science) and practices (e.g., classroom management, how to design effective assessments) to improve instructional quality, and expand the availability of teacher preparation classes that address specific areas of Departmental underperformance (e.g., coursework on how to identify, support, and find additional assistance for students with academic or behavioral challenges).

⁹⁰ Investigators found that a one standard deviation increase in teacher quality in a single grade raises annual earnings by 1% on average. Moreover, researchers linked the replacement of a low (bottom 5%) value-added teacher with an average value-added teacher to a \$267,000 increase in students' average lifetime incomes per classroom taught; see Chetty, et. al, "The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood," 2011

⁹¹ Learning walks enable teachers to visit other instructors to observe their peers' in action and glean best practices. Similarly, communities of practice offer teachers and administrators a forum to meet their counterparts to discuss best practices and solve classroom challenge.

⁹² In California, Long Beach Unified School District has used formal CoPs to improve English language learning (ELL) test scores—a top priority for PRDE-by 9% since 2015.

- Capitalize on partnerships with education NGOs to establish a high-quality fellowship program to train motivated and high-quality professionals on the Island to transition into careers in education and develop long-term home-grown solutions to instructional or administrative challenges (e.g., how to develop teacher evaluations that measure value-add behaviors).⁹³
- Introduce universal student screenings conducted by PRDE school psychologists 4 alongside a Multi-Tiered System of Support (MTSS) framework to ensure that every student's developmental needs are routinely identified and met to prevent children from being erroneously categorized as Special Education students, understand the academic, behavioral, and social-emotional needs of the whole child to pair every student with appropriate interventions (e.g., small group lessons for certain Special Education students), ensure that every Special Education student receives services required by their Individualized Education Plans (IEPs) in the least restrictive setting possible (e.g., reading comprehension support in a General Education classroom), and reduce the use of costly professional services firms to execute IEP analyses and other support services required by Special Education students (e.g., by leveraging in-house developmental staff).

9.4.2 Current state and path forward

Despite its importance, PRDE currently lacks a standardized approach to teacher and director professional development. PRDE has proposed strengthening its STEM offerings, boosting literacy proficiency and bilingualism, and teaching more "real world" or actionable skills. To further these goals, the Oversight Board has allocated funding to several initiatives that would strengthen professional development opportunities and student instruction across the Department.

Over the last several years, the Oversight Board has allocated funding to several initiatives intended to improve student instruction and outcomes by supporting more robust professional development within PRDE. Among these are (i) the UPR-PRDE teacher training partnership, (ii) a soon-to-launch initiative between PRDE and a leading non-profit organization to train ELL instructors across the Island, and (iii) a major effort to hire a dedicated psychologist for each PRDE school.

UPR teacher training partnership

The UPR-PRDE partnership is intended to offer PRDE educators robust training opportunities to help them develop capabilities and skillsets actively sought by the Department. The initiative is made possible through a \$10 million annual appropriation from the Commonwealth to UPR.

⁹³ Some partnerships are already yielding benefits; an ongoing PRDE-Puerto Rico Education Foundation (PREF) initiative has provided administrators guidance on how to manage a regional education system. As part of this effort, PREF identified of barriers to improved student outcomes in Bayamon ORE and proposed several solutions.

To identify students with academic or behavioral learning challenges, screenings should be brief, sensitive to change over time, and grounded in research.

The MTSS framework is a three-tiered approach to identify and meet the needs of General and Special Education students in the least-restrictive setting possible (as required by law). It stresses the use of a pedagogical approach that evaluates the academic, behavioral, and social-emotional needs of the "whole child" to place students into the appropriate tier. The first tier (80-85% of students) includes all General Education and many Special Education students and uses universal screenings to identify learning or behavioral challenges. The second tier (10-15% of students) includes Special Education students with additional academic or behavioral goals that respond to support in a targeted small group setting. The tertiary prevention tier (3-5% of students) offers students that do not respond to second tier interventions individualized support and assistance.

The Oversight Board encourages PRDE to select interventions that align most-closely with its 2022-27 strategic plan, but stresses that the Department must complete the following action items by their respective deadlines:

EXHIBIT 56: REQUIRED IMPLEMENTATION ACTIONS TO STRENGTHEN PROFESSIONAL DEVELOPMENT

	Action item	Deadline
	 Work with the non-profit organizations to apply for discretionary Federal grant to define expenses associated with training ELL instructors 	- June 2020
	Launch NGO partnership to hire and train high-quality ELL instructors	September 2020
To be completed in FY2021	 Design professional development reform that leverages (1) effectiveness criteria, (2) learning walks and communities of progress. (3) the PRDE-UPR partnership, (4) partnerships with non-profit organizations. (5) internal developmental staff and the MTSS framework, and (6) other viable interventions to strengthen school management and student instruction as part of the preliminary strategic plan. 	• February 15, 2021
	Finalize updates to professional development reforms as part of the updated strategic plan)	 March 15, 2021
	 Train all superintendents gerenles escolares, facilitators, directors, echool psychologists, and other developmental support staff in how to leverage the MTSS framework to better support the needs of all students. 	• June 30 2021
	Finalize professional development section of annual reform implementation progress report	 Annually from June 30, 2021

9.5 Make targeted investments to boost family engagement

Given the relationship between family engagement and student achievement, PRDE must broaden its efforts to promote robust family engagement in their students' academic lives. 96 Parental involvement is one of five key factors that, when present, make schools ten times likelier to drive meaningful improvements in student performance. 97 Comprehensive family engagement, meanwhile, can magnify the benefits of parental involvement and has been linked to higher levels of academic performance, stronger student motivation, fewer behavioral problems, and easier social-emotional adjustment. 98 As such, PRDE should leverage non-digital and digital tools, as well proven family engagement strategies, to facilitate robust and impactful family engagement.

9.5.1 Specific initiatives and design parameters

The Certified Fiscal Plan requires that PRDE adhere to a set of parameters. Specifically, PRDE must:

Utilize non-digital and digital engagement tools to empower families to obtain a
robust picture of their child's academic trajectory (e.g. through individualized emails, use
of a student information system containing student grades and attendance data) and
identify opportunities to volunteer in their student's school (e.g. through a weekly

⁹⁶ A family engagement partnership between District of Columbia Public Schools and local parents, for example, yielded improved student literacy scores and boosted student attendance by 24%.

⁹⁷ The other four factors are the (1) use of an instructional guidance system to articulate the "what" and "how" of teaching, (2) professional capacity to improve instruction, (3) the presence of a student-centered learning climate, and (4) strong leadership from principals; see Bryk, et. al., Organizing Schools for Improvement: Lessons from Chicago, 2010.

⁹⁸ Examples of comprehensive family engagement include setting clear academic expectations and helping children develop strong reading habits; see Castro, et. al., "Perental Involvement on Student Academic Achievement: A Meta-Analysis." 2015; Niehaus, et. al., "School Support, Parental Involvement, and Academic and Social-Emotional Outcomes for English Language Learners," 2014.

newsletter), and enable parents of Special Education students to more effectively advocate for and support the needs of their child (e.g. guide to Special Education services).

- Leverage proven family engagement strategies to better equip parents and teachers, using strengths-based approaches and relationship-based practices, to collaborate as equal partners in a child's development and improve student outcomes, especially for Special Education students, and improve student achievement, through two-generation partnerships, by directly intertwining the education of children with parents to improve outcomes for both (e.g. offer parents job training alongside high-quality afterschool for their children).^{99,100}
- Regularly survey the families of PRDE students to empower directors and teachers
 to understand how effectively instructors support students' academic development, and
 identify opportunities to better meet the needs of the whole child (e.g. improve safety,
 provide additional behavioral support).

9.5.2 Current state and path forward

PRDE has taken initial steps to boost family engagement, but the Department must standardize the use of tools and strategies to maximize the impact of its family engagement efforts. In 2018, PRDE created an office of family engagement. While this office is a step in the right direction, the broader Department has yet to institutionalize the use of non-digital and digital tools to give parents a more robust sense of their child's performance. Moreover, the Department has not yet trained administrators or teachers in the use of proven family engagement strategies to foster more effective family engagement.¹⁰¹

While the Oversight Board encourages the Department to pursue interventions that align most-closely with its 2022-27 strategic plan, PRDE must accomplish the action items outlined in *Exhibit 57* by their respective deadlines.

EXHIBIT 57: REQUIRED IMPLEMENTATION ACTIONS TO BOOST FAMILY ENGAGEMENT

	Action item	Deadline
is be	 Design family engagement strategy that leverages (1) non-digital and digital tools, (2) proven engagement strategies. (3) fielding family surveys and (4) other viable interventions to boost family engagement at each achievement tier as part of the preliminary strategic plan. 	 February 15, 2021
completed in FY2021	Finalize updates to family engagement as part of the updated strategic plan	 March 15 2021
	Update family engagement reform section within annual reform implementation progress report	 Annually from July 15, 2022
To be completed in FY2022 and beyond	Distribute family survey	 Every six months from October 15 2021

⁹⁹ Under a strengths-based approach, educators engage with parents as partners in a child's education, leverage parents to broaden their understanding of a student's needs, and work with families to identify opportunities to reinforce in-class lessons outside of school. Relationship-based practices promote reflection on families' personal backgrounds to shape interactions and use parents' emotions around their child's education to establish common ground between educators and households.

¹⁰⁰ For example, a 2-Gen partnership in St. Clair, AL successfully graduated 100% of adult participants from a pharmacy technician program at a local college while improving student attendance at an educational after-school program.

¹⁰¹ Noticel, "Nace nueva oficina en el Departamento de Educación," 2018.

9.6 Systematically collect, manage, and leverage data

Regular data collection, management, and analysis will empower PRDE to make informed decisions to improve student outcomes and assess the effectiveness of its reform efforts. Evidence from mainland states suggests that data collection and analysis will enable PRDE to better direct resources toward impactful evidence-based curricular resources and instructional strategies, make targeted and timely interventions to support vulnerable student populations, and assess the impact of education reforms. ¹⁰² In turn, access to these datasets and analyses will empower educators, families, and third-parties to further improve student outcomes.

9.6.1 Specific initiatives and design parameters

The Certified Fiscal Plan requires that PRDE adhere to a set of parameters to strengthen family engagement:

- Identify which data are crucial to the optimization of funding, the identification of intervention opportunities, and the evaluation of reform effectiveness to conduct a diagnostic of readily-trackable data within PRDE, understand which systems to connect, consolidate, or eliminate, and engage internal and external resources as needed to develop currently unavailable data-tracking capabilities.
- Implement a Data Management System (DMS) that allows superintendents, gerentes escolares, and facilitators to quickly access relevant regional, school, and student data to evaluate student achievement (e.g. META-PR scores, grade point averages) and performance trends (e.g. attendance, truancy, and drop-outs; disciplinary referrals) in real-time, digitize Special Education students' IEP documentation to facilitate compliance with IEP requirements¹0³ and enable PRDE to effectively staff and budget Special Education and Remedio Provisonal programming, more quickly allocate resources (e.g. regional support teams) to support underperforming, vulnerable, or Special Education student populations more efficiently, quickly, and effectively, and gauge the impact of education reforms on student performance and teacher satisfaction.
- Enable directors and other school administrators to access the DMS to support the implementation of the evidence-based progress-monitoring required for the operationalization of the MTSS framework to support all General and Special Education students in the least restrictive manner possible, evaluate the performance of teachers and students relative to key metrics or Departmental policies (e.g. revised time and attendance guidelines), tailor teacher professional development opportunities to address the most-pressing areas of student underperformance, and optimize the allocation of school resources.
- Publish anonymized data within the DMS on a regular basis to facilitate the creation of school-specific performance scorecards to include student and teacher attendance, META-PR results, and graduation rates, among other data points, empower educators to reshape their instructional plans (e.g. content, lesson plans, pacing) in response to student data (e.g. META-PR scores), allow parents to quickly understand their child's educational trajectory and make home-based interventions when appropriate, and

¹⁰² For example, in Texas, the state education agency uses the Student Data System (TSDS) to collect, manage, and produce individual student dashboards for educators to evaluate important information, such as college readiness trends. Similarly, in Kentucky, the Center for Education and Workforce Statistics collects statewide government data to support informed K-12 policymaking at the state, district, and school levels.

¹⁰³ More robust initial compliance with IEP requirements could reduce costly expenses currently incurred through the use of Remedio Provisional as a result of untimely or inadequate support for Special Education students

allow third parties, such as education non-profits and academic researchers, to better understand and support the educational needs of Puerto Rican students.

9.6.2 Current state and path forward

PRDE has made very little progress in collecting or managing data to inform decision-making. To-date, the Department has focused on developing a stronger time and attendance system to track student and teacher attendance. Beyond this initiative, PRDE has yet to train and require all directors and teachers on how to make data-driven decisions. Moreover, the absence of a robust DMS populated by accurate and timely relevant data further inhibits data-driven decision-making—especially at the regional and central offices where robust data would support holistic decision-making across PRDE schools.

Although the Oversight Board encourages PRDE to introduce interventions that align most-closely with its 2022-27 strategic plan, the Department must accomplish the action items outlined in *Exhibit 58* by their respective deadlines.

EXHIBIT 58: REQUIRED IMPLEMENTATION ACTIONS TO FACILITATE DATA-DRIVEN DECISION-MAKING

	Action item	Deadline
	 PRDE Central Office: Assemble data reform working group comprised of PRDE technical personnel and educators (e.g. directors, teachers, etc.) 	 July 1, 2020
	 Develop a template and methodology to establish school-level scorecards and provide the Oversight Board with a plan for implementing them across all schools. At a minimum, the template must include basic school information, teacher attendance rates (as measured by Kronos), student attendance rates (as measures by SIE). META-PR test results, and graduation rates. The methodology to measure outcomes can be based on changes on performance of test scores for both general and Special Education students, changes in attendance rates, and changes in graduation rates, among others. In addition, scorecards must include surveys as a root to promote family and community engagement. 	- July 31, 2020
	 Working group: Define KPIs and ideal technical future state for DMS (e.g. desired data pulputs to appear on student-, school-, and system-wide performance dashboards; IEP digitization, centralization, and management capabilities, creating anonymized datasets to share externally) 	 August 1, 2020
	Discuss KPIs and DMS future state with Oversight Board	August 15, 2020
To be completed in FY2021	 PRDE Central Office: Launch and implement time and attendance policy and tracking system (Kronos) across the entire system including all PRDE schools and administrative offices 	 Start of 2020-21 school year
	 Working group: Conduct a review of PRDE's systems architecture to determine if the existing technical ecosystem can support the future state DMS 	 September 15, 2020
	Working group: Present systems architecture findings to the Oversight Board	 September 30, 202
	 Working group: Design implementation roadmap and milestones to develop a viable DMS system that features a pilot program (with a scaled-down version of the future DMS tested in a small number of schools) at the outset 	 October 31, 2020
	Present implementation roadmap to the Oversight Board	 November 15, 2020
	Publish detail performance scorecard for every PRDE school	 Annually from December 15, 2020
	 PRDE technical staff: Launch DMS pilot program, commence data collection, and begin assessing performance 	 March 31, 2021
	 PRDE technical staff. Create performance report for DMS pilot program 	 June 30, 2021
	PRDE Central Office: Update data reform section within annual reform implementation progress report	 Annually from June 30, 2021

	Action item	Deadline	FY2021 budget incentives
	PRDE technical staff Discuss performance report with Oversight Board	 July 15, 2021 	
To be	 Update scorecards to reflect the most recent information for school year 2020-2021 and provide reporting to the Oversight Board on agreed upon formal 	September 2021	 \$1,500 one-time barus for school directors that perform well on scorecards based on data captured and approved methodology to measure outcomes
in FY2022 and	PRDE technical staff. Scale pilot program across PRDE schools.	July to December 2021	
beyond	 PRDE Central Office Train all educators (e.g. directors, teachers) on how to use the DMS 	 July to December 2021 	
	PRDE technical staff, Launch full DMS at all PRDE schools	January 2022	
	 PRDE Central Office Begin sharing anonymized DMS data with the National Center for Education Statistics 	Orgoing from January 2022	
	 PRDE schools Offer educators refresher courses and parents introductory sessions on how to use the DMS 	Ongoing from January 2022	

Chapter 10. Ease of doing business reform

10.1 Current state of business regulation, investment promotion, and tourism attraction

In 2020, *Doing Business*—an independent assessment of the ease of doing business in 190 economies—rated Puerto Rico the 65th most business-friendly economy. The Island's ranking trails the mainland's (ranked 6th in 2020) and has worsened since 2006, when Puerto Rico was ranked 18th. Bringing the Island's business environment in line with Mexico—the topranked Latin American and Caribbean economy (49th)—will give Puerto Rico the edge that it needs to play in an increasingly competitive environment.¹⁰⁴ The Island competes regionally for investments like tourism; internationally for pharmaceutical, knowledge services, hospitality and tourism investments; and, overall, with mainland states. The Island must improve its business-friendliness and consider ease of doing business reforms to support economic growth.

Instituting comprehensive reforms is particularly important in light of the COVID-19 pandemic. As economic activity slows, companies look to shift supply chains back to the US, and other economies implement rapid reforms to capture growth, instituting ease of doing business reforms is critical. In the aftermath of the pandemic, many firms—especially small businesses—will continue to face significant headwinds (e.g. falling demand for their goods and services), underscoring the need to generate economic activity and attract new investments across the Island. And, while delaying reforms will undermine Puerto Rico's ability to recover from the pandemic, failure to institute them at all will enable mainland states and rapidly-reforming countries to out-compete Puerto Rico for key investments, such as pharmaceutical manufacturing facilities. For example, Costa Rica, a major competitor for knowledge services investments, improved from 121st in the 2010 *Doing Business* survey to 74th in the 2020 iteration, and has become a top player in the field.

¹⁰⁴ Ease of doing business reforms were first proposed in April 2018, when Mexico topped the Doing Business index for Latin American and Caribbean economies as the 49th most business-friendly economy in the world (as of 2020, Chile is the top-ranked Latin American and Caribbean economy at 59th). As such, macroeconomic forecasts within this document—which link an improvement in the Island's Doing Business ranking to economic growth—are dependent on Puerto Rico being ranked 49th or better—rather than on achieving ranking parity with Mexico or Chile. The Republic of Georgia's output per capita increased by 66% and business density tripled between 2006 and 2014—the same period in which Georgia improved its ranking from 98 to eight.

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Puerto Rico's relatively low-ranked business-friendliness is attributable to deficiencies in Government regulations or processes (see *Exhibit 59*), including:

- Getting electricity: The Island's energy supply is costly and unreliable 105
- Dealing with construction permits: Firms spend significant time (165 days), effort (22 procedures), and money (6.7% of project's future value) to obtain permits, on average ¹⁰⁶
- Registering property: Companies must invest significant amounts of time (190 days) and effort (eight procedures), on average, to register property¹⁰⁷
- Paying taxes: Firms spend significant time (218 hours) completing filings (16 payments), on average, and are much likelier to be audited than on the mainland 108
- Occupational licensing laws: Excessive regulations have restricted labor force participation and constrained economic activity
- Freight regulations: Inefficient regulations have inflated transportation costs for businesses across the Island
- Offshore investment attraction: Inadequate Government oversight and resourcing have inhibited efforts to attract investments
- Tourism attraction: Insufficient Government funding and a narrow mandate undermine the Destination Marketing Organization's efforts to transform Puerto Rico into a leading tourist destination

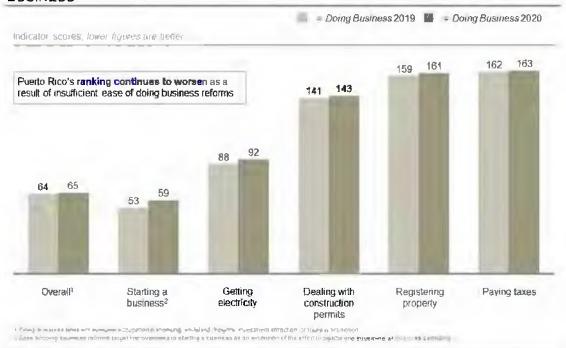
¹⁰⁵ The cost to obtain an electric connection in Puerto Rico is equal to 318% of income per capita; on the mainland, this cost falls to just 22% of income per capita and businesses enjoy much more reliable energy supplies (7.0 points on an 8.0 point scale on the mainland versus 3.0 points in Puerto Rico).

¹⁰⁶ For comparison, businesses must invest 81 days, complete 16 procedures, and pay 0.7% of a project's future value on the mainland.

¹⁰⁷ For comparison, businesses must invest 15 days and complete four procedures on the mainland.

¹⁰⁸ For comparison, businesses must make 11 payments and invest 175 hours on the mainland; the odds of an audit for a corporate income tax underpayment are also substantially lower on the mainland.

EXHIBIT 59: DRIVERS OF PUERTO RICO'S UNDERPERFORMANCE IN DOING BUSINESS



The Governments' efforts to implement ease of doing business reforms have been at best insufficient to compete with other destinations improving faster. At worst, ease of doing business reforms have been rare and not radical or thorough enough to warrant improvements in scoring or in investor attitudes. Notwithstanding the need to replace previous competitive advantages to attract investment and the creation of jobs, the implementation has been uneven and minimal.

As such, when compared to the May 2019 Fiscal Plan, delayed implementation of ease of doing business reforms has delayed the impact on forecasted GNP growth by two years to FY2025 and reduced the uptick (by 0.10%) to 0.30%. Continued Government inaction will further jeopardize projected growth.

To attain the GNP uptick associated with ease of doing business reforms, the Government must focus on achieving the following in FY2021:

- Improve the availability, cost, and reliability of electricity (see Chapter 11).
- Make permits more easily accessible to enable business activity and public safety by streamlining processes and eliminating procedural inefficiencies (e.g. reallocate underutilized personnel) across permitting agencies ("lean transformations"), digitizing all procedures required to start a business into the Single Business Portal, developing the Permitting Performance Dashboard, and launching the Red Tape Commission to support operational and technical transformations.
- Overhaul property registration to facilitate financial transactions and promote disaster-preparedness by identifying and standardizing best practices among registrars to speed up processing, merging the current land registration system with a faster land recordation system, merging the existing land registries into one uniform parcel registry, and launching a campaign to map ownership of all unregistered properties on the Island.

- Simplify paying taxes to spur economic activity by designing a tax administration reform that digitizes, consolidates, and eliminates select tax filings, and conducting an operational needs assessments across Hacienda to reallocate personnel.
- Reduce occupational licensing to facilitate labor force participation by designing legislative reforms to reduce required licenses, and consolidating the processing of occupational licenses under one department
- Eliminate inefficient on-Island freight regulations by ending the minimum land freight charge across the Island
- Strengthen offshore investment attraction efforts by identifying KPIs to gauge the effectiveness of Invest Puerto Rico's promotional efforts, and designing and implementing a strategy to compete with mainland states and other economies for investments as firms move to shift their supply chains to the US
- Prime tourism attraction efforts for success by transferring internal (on-Island), airline, and event marketing responsibilities and funding from Puerto Rico Tourism Company to Discover Puerto Rico

While all reforms will help produce a friendlier business environment, simplifying and digitizing permits (including business registrations), property registration, and paying taxes will have a particularly significant impact. As such, the streamlining of these three processes will foster economic growth and job creation.

10.2 Streamline permits to promote business activity and public safety

To foster economic development, promote public safety, and enable recovery from the COVID-19 pandemic, the Government must revamp the Island's permitting system. Despite recent reform attempts (resulting in a new Joint Regulation that set Island-wide permitting rules and time limits to adjudicate permits), the average construction permit still takes 165 days to obtain. ¹⁰⁹ Delays in construction may incentivize informal construction, potentially increasing risks to public safety. ¹¹⁰ Without thorough action, permitting will impede the Island's economic revitalization—discouraging construction and business operations and undermining recipients who aim to rebuild their homes and businesses in the wake of natural disasters. In the aftermath of the COVID-19 pandemic, creating a streamlined permitting system that allows businesses to quickly start or restart activity will be crucial to support Puerto Rico's recovery—especially in the case of small business, which are particularly vulnerable to economic disruptions. ¹¹¹

To redesign the Island's permitting regime, the Government must:

■ Implement operational changes to permitting processes: Permitting regulations must be streamlined to facilitate economic activity without sacrificing public safety

¹⁰⁹ World Bank Group, Doing Business 2020, 2019

¹¹⁰ In 2007, Interviron Services, Inc. concluded that as much of 55% of the Puerto Rico's residential and commercial construction could have been done informally; see Hinojosa, et. al., "The Housing Crisis In Puerto Rico and the Impact of Hurricane Maria." 2018

¹¹¹ For example, the average small business generally holds less than one month of cash on hand. JP Morgan Chase & Co Institute, "Cash is King: Flows, Balances, and Buffer Days: Evidence from 600,000 Small Businesses," 2016.

- Overhaul the Single Business Portal (SBP): The platform requires solutions to glitches and additional features to meet the Island's permitting needs¹¹²
- Launch Red Tape Commission: A commission of private and public experts can help identify, design, and prioritize the implementation of operational and technical reforms

While the implementation of these reforms is critical, the Oversight Board does not assert that they are exhaustive and encourages the Government—and especially the Planning Board (JP) and the Permits Management Office (OGPe)—to implement additional reforms to improve the permitting system.¹¹³

10.2.1 Permitting reform design parameters

The 2020 Fiscal Plan requires the Government to adhere to a set of parameters when implementing permitting reforms. Specifically, the Government must:

Implement operational changes to permitting processes

■ Improve efficiency while maintaining public safety by eliminating sources of waste (e.g. under-trained employees asking applicants for excess documentation) through a lean transformation and routine regulatory training and testing for employees at key permitting agencies, 114 and issuing all construction (PCOC) 115 and business (PU) 116 permits that comply with basic requirements on a conditional basis, with continued validity dependent on the findings of proactive (mid-construction or -operation) inspections. 117 The Government must also increase utilization (i.e. identifying additional inspection types to delegate) and oversight of third-party inspectors (e.g. more training and auditing), 118,119 streamline permitting for strategic projects (e.g. major developments, projects above a certain value threshold), and guarantee highly-delayed applications a right to obtain agency review. 120

¹¹² SBP was created by Act 19-2017 to serve as the Island's one-stop portal for construction and business permits, individual and corporate incentives, and business registration procedures. To-date, the platform is only used to solicit and adjudicate permits and incentives. SBP has been played by technical issues (e.g. incorrectly computing application fees, sending applications to the wrong permitting office, etc.) and hampered by the absence of important features (e.g. amending applications, allowing permitting agencies to view all tasks awaiting completion, etc.).

¹¹³ For example, creating a more coherent land use plan and zoning map could streamline the permitting process by eliminating the need for time-intensive pre-construction consultations. Multi-year delays in updating this map have increased the need for such consultations as Island's developmental trajectory has necessitated commercial and industrial development in areas officially zoned for residential or agricultural uses. As such, the Oversight Board urges collaboration between JP and autonomous municipalities to produce an updated land use plan and zoning map that meets the Island's economic and environmental needs.

¹¹⁴ These include the Permits Management Office (OGPe), the chief permitting regulator; the Environmental Quality Board (DRNA-JCA), which exempts permits from environmental impact reviews and conducts the reviews themselves; and the Department of Health (DOH) and Firefighters Bureau (CB), which issue the sanitation licenses and fire prevention certificates required for businesses to operate.

¹¹⁵ The consolidated construction permit (PCOC) is required for all construction on the Island.

¹¹⁶ The single permit (PU) is required of all businesses on the Island to operate. It consolidates the use permit, the environmental quality certificate, the fire prevention certificate (adjudicated by CB), the sanitation license (adjudicated by DOH), and, depending on the nature of the business, liquor and tobacco licenses (adjudicated by Hacienda).

¹¹⁷ All permits are currently adjudicated through a time-intensive analysis to determine whether projects as written in the applications would comply with regulations. In a proactive inspection regime, regulatory compliance is ascertained through live inspections, enabling adjudicators to issue permits more quickly (reducing processing times), inspectors to verify code compliance in practice (boosting safety), and builders spot quality control issues earlier on (averting expensive rework).

¹¹⁸ Profesionales autorizados may complete fire prevention certificate inspections, but both OGPe and local permitting experts have voiced concern about the quality of some third-party inspections.

¹¹⁹ In Washington, D.C., third-party inspectors may conduct building, mechanical, electrical, and plumbing with supervision from the city's Commercial Inspections Division; see District of Columbia, "Third Party Program Procedure Manual 2018," 2018.

¹²⁰ The Government could offer significantly delayed permit applications the ability to petition OGPe's Adjudication Board (OGPe-JA) for a final decision. In turn, the Government should bolster the board's technical capabilities by developing a permanent technical staff to review applications and require OGPe-JA to issue final rulings on their status by a certain deadline.

- Accelerate construction permitting by expanding the types of businesses and construction projects excluded from environmental impact review, 121 issuing infrastructural recommendations (SRI) on a conditional basis, and allowing one SRI to apply to multiple permits if associated with the same project
- Expedite business permitting by eliminating sanitation inspections conducted before
 a facility commences operations and ending sanitation inspections for low-risk businesses
 (e.g. offices, retail outlets) altogether.^{122,123}
- Improve municipal permitting offices' compliance with permitting regulations by predicating the renewal of legal agreements that allow autonomous municipalities to issue permits on their compliance with permitting regulations, ¹²⁴ redirecting applications and fees away from non-compliant municipalities, ¹²⁵ and allowing municipal permit applicants to document a municipal permitting office's regulatory non-compliance and petition OGPe to review their cases.
- Allowing Government agencies to propose regulatory changes in response to economic or technological changes to maximize efficiency and safety. 126

Overhaul the Single Business Portal (using the FEMA Hazard Mitigation funds detailed in Section 10.2.3)

- Create the technical foundation (e.g. new features) necessary for operational reforms.
- Facilitate inter-agency collaboration by offering all permitting agencies and municipal offices more visibility into outstanding tasks (e.g. inspections) that they must complete and storing their historical permitting data (e.g. previously-adjudicated permits). 127
- Digitize and centralize all procedures to start a business as required by Act 19-2017.¹²⁸
- Launch a Permitting Performance Dashboard to evaluate permitting agencies' compliance with processing time limits found in the Joint Regulation ¹²⁹ by calculating the average processing time (submission to adjudication) for all permit classes and types (and

¹²¹ Before applying for permits, applicants must solicit an environmental document approval from OGPe. The categorical exclusion (DEC) is the most common and fastest to adjudicate (as no analyses are required). Applicants who do not qualify for a DEC must complete an environmental assessment (EA) or an environmental impact assessment (DIA).

¹²² An end to preliminary inspections would allow DOH to increase sanitation audits of operational businesses to boost public safety and allow the department to issue licenses more quickly, enabling businesses to commence operations earlier on.

¹²³ An end to low-risk business sanitation inspections would reduce regulatory burdens for those businesses and enable DOH to allocate additional personnel to inspect high-risk facilities (e.g. labs, restaurants).

¹²⁴ Act 81-1991 created autonomous municipalities. Under existing regulations, autonomous municipalities are legally allowed to open municipal permitting offices once they have submitted municipal zoning maps to and signed convenios de delegacion with JP. Convenios de delegacion are valid for five-year periods.

¹²⁵ OGPe could redirect permitting applications and fees away from municipalities that display sustained patterns of non-compliance (via SBP) or (in conjunction with JP) digitally revoke their authority to issue permits altogether.

¹²⁶ Modifications should respond to technological advances (e.g. development of new software that renders certain analyses obsolete). An effective mechanism in the Joint Regulation would require JP to (1) review all proposals and send viable ones to public commentary on a quarterly basis and (2) update the Joint Regulation within 90 days of their approval.

¹²⁷ Currently, all agencies except OGPe lack a real-time view of the number of inspections and analyses outstanding at their agency and cannot track how many inspections are assigned to or completed by their employees every day.

¹²⁸ As such, the Government must target complete integration into SBP of (1) filings for business certificates, (2) submission of an employer identification number (EIN) from the Internal Revenue Service (IRS) to Hacienda to support employee tax withholding, (3) filings for municipal business licenses, (4) filings for unemployment and disability account numbers from the Department of Labor and Human Resources, (5) fillings for workmen's insurance policies from State Insurance Fund Corporation (SIFC), and (6) fillings for merchant certificates.

¹²⁹ The Joint Regulation creates three permit classes: Ministerial permits comply with all land use, zoning, and building regulations and must be adjudicated within 30 days. Discretionary permits that contravene only building rules (e.g. square footage limits) are subject to a Construction Consultation (CC) but not subject to public commentary and must be adjudicated within 120 days. All other discretionary permits are subject to a public hearing and must be adjudicated within 180 days.

agency sub-tasks if adjudicated by two or more agencies),^{130,131} tracking the number of applications closed without adjudication or returned to applicants due to incomplete documentation for all permit classes and types,¹³² recording the percentage of third-party permit inspections audited by OGPe, and enabling applicants to view their permit's approval status in real-time.

■ Launch a Red Tape Commission¹³³ comprised of private and public sector experts to identify opportunities to streamline the environmental documents (DEC, EA), major construction procedures (CUB, PCOC, SRI), and business permit (PU). The commission should also map the objectives of all OGPe-issued permits to identify overlaps in scope, outdated use cases, permits that could be processed in parallel or leverage the same analyses, as well as recommend which permit inspections could be delegated to third-party inspectors and flag major SBP glitches and common-sense technical upgrades.

10.2.2 Reform targets and indicators

Successful property registration reforms will allow Puerto Rico (ranked 143rd in the *Doing Business* construction permits indicator) to compete with the top-ranked Latin American and Caribbean economy in this indicator (ranked 87th) by reducing the time, number of procedures, and cost required to obtain permit by FY2023. It should also serve to digitize and integrate all procedures required to start a business into SBP (Act 19-2017).

The Oversight Board will also track the following indicators to monitor the Government's implementation of permitting reforms:

- Average number of days to obtain CUB, DEC/EA, PCOC, PU, and SRI permits
- Number of procedures required to obtain CUB, DEC/EA, PCOC, PU, and SRI permits
- Percentage of backlogged CUB, DEC/EA, PCOC, PU, and SRI permits
- Number of business registration procedures integrated into SBP
- Number of procedures required to start a business
- Average number of days required to start a business

10.2.3 Current state and path forward

The Government has made no meaningful progress in simplifying, expediting, or enabling permitting. Agencies struggle to reduce permit processing times due to a continued reliance on inefficient application review procedures (e.g. time-intensive proposal-based adjudication, continued use of sequential application processing). The operational redesign outlined above will enable agencies to comply with processing time limits to adjudicate permits. SBP's functionality, meanwhile, has been reduced by technical glitches (e.g. applications sent to incorrect offices) and a lack of critical features (e.g. amending applications). SBP upgrades will provide a foundation for the operational transformation.

¹³⁰ Class refers to a permit's ministerial or discretionary character, type refers to its use (e.g. PCOC, PU, etc.).

¹³¹ The SRI is one example of a permit adjudicated by more than one agency. Although it is issued by OGPe, the determination is based on input from the affected infrastructure agency (e.g. PREPA).

¹³² The Joint Regulation resets time limits when agencies receive an application lacking required documentation. Local permitting experts have noted prior experiences with agencies marking completed applications "incomplete" to reset application time limits.

¹³³ In New York City, a red tape commission developed more than 60 solutions to address inefficient business processes, including permitting. In New Jersey, the creation of a statewide commission coincided with a slowdown in the issuing of new regulations. When enforceable by law, red tape reduction efforts have drastically reduced excess regulations. Rhode Island eliminated 31% of all statewide regulations when it legally set its entire regulatory code to expire at the end of 2018. See Broughel, "A Dark Day for Red Tape in the Buckeye State," 2019.

This inaction is particularly concerning given the Government's access to a \$144 million FEMA Hazard Mitigation grant over the last two years to revamp the Island's permitting system. To date, the Government has only spent and submitted reimbursement requests for less than \$4 million. The grant, set to expire in September 2024, must be spent in its entirety to maximize its potential to revamp the Island's permitting system in an effective and lasting manner. 134 The grant, awarded to the Planning Board, is meant to support the enforcement of stronger building codes and permitting regulations and can fund:

- Hiring additional permitting and building inspectors across the Island
- Purchasing or upgrading technological systems that support code enforcement (e.g. SBP)
- More robust training for inspectors to promote compliance with permitting regulations and building codes, as well as community outreach to educate stakeholders on changes
- Hiring technical experts (e.g. lean consultants) to build code enforcement capabilities at JP, OGPe, and municipal permitting offices

To successfully implement permitting reform, the Government must accomplish the following action items by their respective deadlines:

	A	ction item	0	CM CM	Perphine
FY2020	٠	Establish RedTape Commission comprised of private sector experts, CB, DOH, DRNA-JCA, JP, OGPe, and the Oversight Board	•	OGPe	June 30, 2020
	٠	Design implementation plan to digitize all business registration processes		Business registration agencies'	September 30, 2020
	•	Review all internal processes to identify operational inefficiencies and develop strategies to address them	•	Permitting agencies ²	September 30, 2020
	ŀ	Compile all necessary SBP fixes and upgrades (including Permitting Performance Dashboard)	•	RedTape Commission	September 30, 2020
	•	Set definition of strategic projects and codify streamlined permitting procedures for them	•	DDEC, JP, OGPe	September 30, 2021
FY2021	ľ	Engage relevant third-parties to (1) conduction transformation at CB, DOH, DRNA-JCA, and OGPe and (2) implement SBP taxes and upgrades (including digitization of all procedures to start a business)—both of which can be funded via FEMA. Hazard Mitigation grant	•	JP, OGPe	November 30, 2020
	ŀ	Red Tape Commission shares recommendations re: (1) opportunities to streamline permits, (2) inspections to delegate to third-party Inspectors, and (3) SBP recommendations with agencies and Oversight Board	٠	RedTage Commission	November 30, 2020
	٠	Discuss recommendations with Oversight Board	•	Red Tape Commission	December 15, 2020
	•	Launch lean transformations and SBP overhaul (including trus hess registration digilization efforts) funded via FEMA-Hazard Mitigation grant	•	CB, DOH, DRNA-JCA, OGPe, third-parties,	January 1, 2021
	•	Implement all necessary administrative and legislative changes to support procedural streamlining, SBP modifications, and digitization of procedures to start a business	•	Businessregistration and per- mitting agencies, Legislature	March 31, 2021
	٠	Fully digitize all procedures to start a business within SBP	٠	Third-parties	June 30, 2021
	٠	Finalize SBP gyerhaul	•	Third-parties	November 30, 2021
FY2022	٠	Launch publicly-available PPO	٠	JP, OGPe	December 15, 2021
and beyond	•	Reduce average processing times for each permit type and class to 2x Joint Regulation Itmils	•	Permitting agencies	June 30, 2022
		Reduce average processing times for each permittype and class to comply with Joint Regulation limits	•	Permitting agencies	June 30, 2023

These include the Permits Management of thice (OGPs), the Department of Agriculture (DA), the Department of Natural and Environmential Resources Environmental Quality Sears (IRNA Jos.), the Aquaductions Server Authority (PASA), the Electric and Power Authority (PRENA). High way and Transportation Authority (PTA), Salai Yeste Management Authority (PTA), Telecommentations Registery Beart (PRENA), Institute of Prena Search (PRENA), and the Prena Search (PRENA) and the Prena Search (PRENA).

10.2.4 Enforcement mechanisms

To ensure that the Government implements *impactful* measures, the 2020 Fiscal Plan requires that JP and OGPe create and launch the Permitting Performance Dashboard (PPD) by the end of December 2021.

The 2020 Fiscal Plan also requires that each permitting agency must adjudicate each permit type (e.g. PCOC, PU) and class (e.g. ministerial, discretionary)—on average—within 2x the limits by FY2022 and at the limit by FY2023. The Oversight Board will utilize the PPD to gauge

¹³⁴ The Government must also ensure that corresponding request for reimbursement are submitted to FEMA in a timely fashion.

agencies' compliance with time limits, and it will track the percentage of permitting applications closed without adjudication or marked incomplete and returned to applicants to ensure that all permitting agencies achieve these targets legitimately.

10.3 Overhaul property registration to facilitate financial transactions and promote disaster-preparedness

To remove barriers to financial activity and promote disaster-preparedness, the Government must continue implementing property registration reforms in FY2021. Accelerating property registration will ensure that all residents and businesses can quickly and reliably document property rights—crucial to day-to-day business operations and to post-disaster recovery efforts. As it stands, the Island's current set of disjointed registries do not comprehensively map all land ownership, complicating Government disaster relief efforts. ^{135,136,137} To empower residents and businesses to recover from future natural disasters and comply with US Department of Housing and Urban Development (HUD) guidelines for unlocking \$8.3 billion in Community Development Block Grant (CDBG-MIT) funds, reforms must also demonstrate meaningful progress in the creation of a uniform parcel registry that can be used to verify the ownership of properties across the Island.

10.3.1 Reform design parameters

The Certified Fiscal Plan requires the Government to adhere to a set of parameters when implementing property registration reforms. Specifically, the Government must:

- Reduce the amount of time required to register a property by identifying and promoting the systemwide adoption of top-performing registrars' best practices, ¹³⁸ conducting performance analyses to reallocate support staff (e.g. technicians) to maximize registrars' processing capabilities, eliminating the backlog of outstanding property registrations (see UPR-Property Registry task force below), and replacing or combining the existing land registration system with a faster and more comprehensive land recordation system. ¹³⁹
- Create a uniform parcel registry that comprehensively records property ownership and rights across the Island (funded by a \$50 million CDBG-DR grant for this purpose) by prioritizing mapping the entire Island, including only basic information for each property, and limiting participation to stakeholders with registration

¹³⁵ In the aftermath of the 2017 hurricanes, many individuals and families affected by the disasters struggled to document legal ownership of their properties, requiring FEMA to make an exception and allow claimants to self-certify ownership,

¹³⁶ Unregistered properties, also known as informal housing stock, are generally self-built by lower-income households, often in flood zones and without rigid building code compliance. In 2007, Interviron Services, Inc. concluded that as much of 55% of the Puerto Rico's residential and commercial construction could have been done informally.

¹³⁷ Puerto Rico has three property registration systems: (1) DOJ-PR's registry records transactions (e.g. acquisitions) relating to real properties and uses registrars to analyze the validity of property transactions; (2) Centro de Recaudacion de Ingresos Municipales (CRIM) maintains a digital registry of real property in each municipality (the Cadaster of Puerto Rico) for tax, legal, economic, and administrative purposes; (3) JP maintains an interactive database with location, environmental, and land use data across the Island. Neither the DOJ-PR registry nor the Cadaster accurately capture property ownership. Registration in the former is voluntary, time-consuming, expensive, and unnecessary in the absence of financial transactions. While registration in the latter is mandatory, the Cadaster does automatically record informal transactions.

¹³⁸ DOJ-PR's registrars exhibit significant disparities in performance—in 2019, 22% of registrations inscribed by DOJ-PR were inscribed by its five most-productive registrars, while its five least-productive registrars accounted for only 6% of processing volume; see Puerto Rico Department of Justice-Property Registry, performance data shared with Oversight Board, 2019.

¹³⁹ The Island's land registration system (a) is voluntary, (b) legally guarantees title to a property, and, by virtue of its legal protections, (c) often takes longer to process registrations. Land recordation systems (like those on the mainland) mark the temporal order in which documents are filled, providing a priority claim of ownership. This does not certify that a property is free of liens. Assurances of ownership are established through title searches intended to verify that preexisting claims or liens do not exist, escrow companies that assure the timely transfer of resources and documents, and title insurance to provide a financial safeguard against title defects.

data, establishing an administrative and technical protocol for continuously updating the parcel registry to reflect legal changes (e.g. new ownership), and creating a legal protocol to incorporate informal housing stock lacking legally-determined boundaries, deeds, or titles into the uniform parcel registry.

■ Launch a GIS map that provides an interactive geospatial presentation of data populated within the uniform parcel registry (funded by the same \$50 million CDBG-DR grant mentioned above) by contracting surveyors and GIS service providers to develop a digital map of the Island, and prioritizing the overlay of parcel and ID, ownership, land use, and valuation data¹⁴⁰

10.3.2 Reform targets and indicators

Successful property registration reforms will allow Puerto Rico (ranked 161st in the *Doing Business* registering property indicator) to compete with the top-ranked Latin American and Caribbean economy in this indicator (ranked 95th) by reducing the time and number of procedures required to register property by FY2023. It will also allow Puerto Rico to demonstrate to the US Department of Housing and Urban Development (HUD) how ongoing efforts to develop a uniform parcel registry and GIS map will assist HUD in verifying legal and physical addresses associated with the use of CDBG-MIT funds.

The Oversight Board will also track the following indicators to ensure that the Government implements property registration reforms:

- Average number of days to register property
- Number of procedures required to register property
- Number of backlogged property registration applications

10.3.3 Current state and path forward

The Government has taken steps to streamline the Island's property registration processes in recent years, but significant work remains to be done. Digitization of property registrations has boosted productivity at the Department of Justice-Property Registry (DOJ-PR), enabling the registry to process more documents than it received. DOJ-PR and the University of Puerto Rico (UPR) launched a task force to further reduce the backlog in March 2020, but its efforts were cut short by the COVID-19 shutdown. Currently, more than 400,000 registrations remain backlogged, and registrations average 190 days to process. 142

UPR-Property Registry backlog reduction task force

In March 2020, the Oversight Board worked with UPR and DOJ-PR to establish a task force to eliminate the property registration backlog at DOJ-PR. Funded via \$1 million in unearned UPR revenues from FY2018, the task force comprised more than 100 UPR (primarily law) students and DOJ-PR registrars who were supposed to process and inscribe backlogged registrations. The objective of the task force was to eliminate all backlogged documents in the San Juan area while exposing student participants to the intricacies of the legal processes surrounding property registration. Unfortunately, the COVID-19 pandemic cut short the task force's efforts shortly after they commenced, and is expected to resume operations as the Island re-opens its economy during the aftermath of the pandemic.

¹⁴⁰ After satisfying HUD requirements, the Government could populate additional data (e.g. utility, school population, crime) to meet the Island's legal and economic needs.

¹⁴¹ This resulted in the elimination of 30,000 documents from DOJ-PR's backlog; see Puerto Rico Department of Justice-Property Registry, performance data shared with Oversight Board, 2019.

¹⁴² Puerto Rico Department of Justice-Property Registry, performance data shared with Oversight Board, 2019; the World Bank Group, Doing Business 2020, 2019.

To successfully implement property registration reform, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 61: REQUIRED IMPLEMENTATION ACTIONS FOR PROPERTY REGISTRATION REFORM

	Action item	Owner	Ceadline
EA.5050	 Establish a property registration reform working group comprised of CRIM. DOJ-PR. JP. Vivienda, and the Oversight Board 	 Vivienda 	June 30, 2020
	Identify top-performing registrars and best practices	 DOJ-PR 	August 15, 2020
	 Issue request for proposal for third-party surveyors and GIS providers to begin developing digital map of the Island (funded by a S50 million CDBG-DR grant for this purpose) 	 Vivtenda 	September 30, 202
	 Design strategy to accelerate property ragistration processing times by (1) promoting systemwide adoption of best practices, (2) reallocating technical staff, and (3) hybridizing the land registration system with a faster and more comprehensive recordation system and share with Oversight Board 	Working group	October 15, 2020
	Discuss strategy to accelerate property registration processing times with Oversight Board	 DOJ-PR 	October 31, 2020
	Begin implementing strategy to reduce property registration processing times	DOJ-PR	November 15, 202
	 Issue request for proposal for third-party firm to merge CRIM. DOJ-PR, JP property registries into uniform parcel registry 	 Vivienda 	November 15, 202
FY2021	 Design protocol to incorporate informal housing stock when identified into uniform parcel registry 	 Working group 	January 31, 2021
	 Design campaign to map unregistered properties or those with outdated ownership and share with Oversight Board 	 Working group 	February 15, 2021
	Discuss mapping strategy with Oversight Board	 Working group 	February 28, 2021
	Launch mapping campaign and begin updating uniform parcel registry and GIS map	• TBD	March 31, 2021
	 Finalize necessary administrative and legislative changes to introduce hybrid registration system 	• TBD	April 15, 2021
	 Define administrative protocol to continuously update uniform parcel registry in response to legal changes (e.g. ownership changes) 	 Working group 	April 30, 2021
	Finalize merger of CRIM, DOJ-PR, and JP property registries into uniform parcel registry	 Third-parties 	May 30, 2021
	 Introduce technical mechanisms to continuously update uniform parcel registry and GIS map in response to legal changes (e.g. pwnership changes) 	 Third-parties 	June 15, 2021
	Conclude mapping campaign	• TBD	March 31, 2022
FY2022 and	Finalize upload of data from mapping campaign into uniform parcel registry and GIS map	Third-parties	June 30, 2022
beyond	Finalize uniform parcel registry that maps all ownership and rights across the Island	• TBD	September 15, 202
,	 Finalize GIS map that include parcels, property IDs, property ownership, land use, and property value, data 	• TBD	January 31, 2023

10.4 Simplify paying taxes to spur economic activity

To spur economic activity, the Government must implement reforms to meaningfully simplify paying taxes. The Oversight Board acknowledges Hacienda's progress in digitizing and centralizing an increasing number of tax filing payments and into SURI. However, several major filings and payments that businesses and residents in Puerto Rico must make (including municipal and property taxes) have not been digitized or centralized, requiring filers to interface with multiple revenue agencies and mediums to comply with their tax obligation.

10.4.1 Reform design parameters

The 2020 Fiscal Plan requires the Government to adhere to a set of parameters when implementing tax administration reforms. Specifically, the Government must:

- Reduce the time required to pay taxes by digitizing analog tax filings (e.g., municipal and property taxes) and post-filing error-resolution processes (e.g. by creating secure uploads for digital document) into SURI, as well as by exploring opportunities to reduce the number of required tax payments (e.g., less frequent payments for smaller amounts).
- Accelerate the processing of tax filings and timeliness of audit completion by conducting an operational needs assessment to support the reallocation of underutilized personnel to critical functions (e.g. error-resolution, audits), and identifying and implementing operational efficiencies within the audit process (e.g., by identifying bottlenecks, duplicative work, and workload scheduling).

• Create a working group to identify and prioritize efficiency-minded regulatory changes that can be incorporated into future SURI releases.

10.4.2 Reform targets and indicators

Successful tax administration reforms will allow Puerto Rico (ranked 163rd in the *Doing Business* paying taxes indicator) to compete with the top-ranked Latin American and Caribbean economy in this indicator (ranked 99th) by reducing the time and number of filings that companies must complete to pay taxes by FY2023

The Oversight Board will also track the following indicators to ensure that the Government implements tax administration reforms:

- Average number of mandatory tax payments for corporations
- Doing Business post-filing index score

10.4.3 Current state and path forward

Although digitization efforts around SURI have helped make tax filings less burdensome, paying taxes remains a cumbersome and time-consuming process. To its credit, SURI has helped filers reduce the time required to complete certain filings and payments (e.g. form 480, SUT, corporate income taxes) by digitizing and centralizing those processes in one place. However, municipal and property tax filings and payments remain time-consuming and complex. Post-filing audit procedures are particularly time-consuming and challenging to resolve, often involving multiple in-person visits to Hacienda. 143

To successfully implement tax administration reform, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 62: REQUIRED IMPLEMENTATION ACTIONS FOR TAX ADMINISTRATION REFORM

	Action item	Owner	Deadline
To be	 Establish a tax administration reform working group comprised of private sector tax professionals, CRIM, Hacienda, and the Oversight Board 	- Hacienda	September 30, 2020
	 Assess basic operational needs across all departments to facilitate reallocation of personnel to processing filings, error-resolution, and audits 	 Hacienda 	January 31, 2021
completed in FY2021	 Design tax administration reform by (1) digitizing tax payments, (2) consolidating the number of tax filings (3) eliminating burdensome filings, and (4) reshuffling internal personnel and strengthening their training and decision-making authority[†] 	 Working group 	March 31, 2021
	 Discuss strategy, projected costs, and necessary administrative and legistative changes with Oversight Board 	 Hacienda 	Арлі 30, 2021
To be completed in FY2022 and beyond	 Design implementation plan to maximize the effectiveness of tax administration reforms with the Oversight Board 	• TBD	September 30, 2021
	 Discuss implementation plan with Oversight Board 	 Hacienda 	October 15, 2021
	 Finalize necessary administrative and legislative changes required to implement tax administration reforms for tax year 2021 	 Hacienda 	October 31, 2021
	 Finalize technical upgrades to Hacienda's digital platforms 	 Hacienda 	December 15, 2021
	- implement tax administration reform	 Hacienda 	January 1, 2022

¹⁴³ Most technicians only have the authority to resolve (and frequently escalate to their superiors) errors worth \$25,000 or less, necessitating follow-up visits to speak to higher-level officials.

10.5 Reduce occupational licensing to facilitate labor force participation

Current occupational licensing requirements complicate certain workers' entry into the formal workforce and expose applicants to lengthy wait times. Occupational licensing can boost the quality of services rendered while improving public safety, but the practice can also restrict labor force participation and economic output while increasing the cost of goods and services. 144 To promote labor force participation and facilitate migration to the Island, the Government should streamline, eliminate, or harmonize occupational licensing requirements with those on the mainland. Additionally, the Government could leverage established best practices when creating new licenses to produce less burdensome regulations and reduce the need for future time-intensive legislative overhauls.

10.5.1 Reform design parameters

The 2020 Fiscal Plan requires the Government to adhere to a set of parameters when implementing occupational licensing reforms. Specifically, the Government must review requirements to identify licenses for simplification, consolidation, or elimination, and assess the basis for legislating a mandated reduction in occupational licensing regulations, as done in other US jurisdictions. ¹⁴⁵ It must also join US mainland compacts that recognize licenses obtained in other states, such as the Compact for the Temporary Licensure of Professionals, as well as amend current licensing requirements to align them with those in mainland states that are home to significant Puerto Rican populations that could one day return to the Island (e.g. Florida, New Jersey, New York, Pennsylvania) or employ significant numbers of workers in industries that Puerto Rico aims to attract (e.g. knowledge services, hospitality and tourism) to facilitate relocations.

Additionally, the Government must create less burdensome occupational licenses in the future by employing less-restrictive alternatives for occupations that pose low risks to public safety, closely tailoring license requirements to mitigate specific health and safety risks, conducting regular cost-benefit analyses for all analyses, and reducing barriers to inter-state mobility. 146

10.5.2 Reform indicators

The Oversight Board will also track the following indicators to ensure that the Government implements occupational licensing reforms:

- Average number of days to obtain an occupational license
- Number of occupational licenses eliminated or harmonized with interstate compacts

10.5.3 Current state and path forward

The Island's occupational licensing regime remains expansive and inefficient. More than 60 professions are licensed by autonomous boards and supervised by DOH, the Department of State (DOS), or the Puerto Rico Tourism Company (PRTC). Workers must meet application

¹⁴⁴ The White House, "Occupational Licensing: A Framework for Policymakers," 2015; Carpenter, et. al., "License to Work: A National Study of Burdens from Occupational Licensing," 2017

¹⁴⁵ Virginia, for example, created an inventory of all statewide regulations and mandated a 25% reduction in occupational licensing rules; see Broughel, "A Dark Day for Red Tape in the Buckeye State," 2019.

¹⁴⁶ These include certification, registration, mandatory bonding, or more direct regulation of companies; with certifications, for example, the Government would limit the use of professional titles to licensed workers but allow workers to practice a trade. See The White House, "Occupational Licensing: A Framework for Policymakers," 2015.

requirements set by licensing boards. Applications are then processed by their respective boards and issued by DOH, DOS, or PRTC. Processing times vary substantially.¹⁴⁷

To successfully implement occupational licensing reform, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 63: REQUIRED IMPLEMENTATION ACTIONS FOR OCCUPATIONAL LICENSING REFORM

Action item	Owner	Deadline
 Establish working group comprised of DOH, DOS, PRTC, and the Oversight Board 	DOH, DOS, PRTC	June 30, 2020
 Design reform to reduce licensing by (1) creating protocol to streamline ficenses. (2) joining inter-state licensing compacts, and (3) aligning ficensing rules with those in states with large Puerto Rican communities 	Working group	October 31, 2020
 Identify viable strategies to promote local boards' compliance with licensing reforms 	Working group	November 15, 2020
 Design strategy to accelerate processing of licenses within DOH and DOS (e.g. consolidation under one department) 	 Working group 	November 30, 2020
 Discuss licensing reform, compliance strategy, processing improvements, projected costs, and necessary administrative and legislative changes with Oversight Board 	Working group	December 15, 2020
 Finalize necessary administrative and legislative changes required to implement occupational licensing reforms from FY2022 onward 	• TBD	June 30, 2021
 Implement revised occupational licensing requirements 	 Working group 	July 1, 2021
 Publish performance report detailing (1) the average time and costs required to obtain each license type and (2) administrative or legislative changes made to reduce licenses or accelerate their processing 	 Working group 	Annually from August 15, 2022

10.6 Eliminate inefficient on-Island freight regulations

The deregulation of land freights would reduce transportation costs for the Puerto Rican business community. For nearly 100 years, the federal Interstate Commerce Commission regulated land freights across the US, creating artificial price floors to support the railroad and trucking industries and protect them from competition. The elimination of those price floors reduced the cost of truckload-sized shipping costs by 25% between 1977 and 1982 alone.

10.6.1 Reform design parameters

The 2020 Fiscal Plan requires that the Transportation and Public Services Bureau (NTSP) issue an administrative order eliminating the minimum land freight charge across Puerto Rico.

10.6.2 Reform indicators

The Oversight Board will also track the minimum land freight in dollars to ensure that the Government implements on-Island freights reform.

10.6.3 Current state and path forward

The continued regulation of land freights promotes the interests of inefficient trucking companies at the expense of the broader business community and, by extension, their

¹⁴⁷ In 2019, applicants for designer licenses waited approximately 33 business days to receive their license (18 days at the board and 15 at DOS), while barbers waited nearly 160 days (117 days at the board and 40 at DOS). Puerto Rico Department of State, performance data shared with Oversight Board, 2019.

customers. Puerto Rico is one of only two major US jurisdictions that still regulate land freights. Regulated freights have reportedly decreased the quality of services rendered by carriers and shippers, and forced companies to hold additional inventory, all of which have helped increase the cost of doing business in Puerto Rico. 148

To successfully implement on-Island freights reform, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 64: REQUIRED IMPLEMENTATION ACTIONS FOR ON-ISLAND FREIGHTS REFORM

	Action item	Owner	Deadline
To be completed in FY2021	Issue an administrative order aliminating the minimum land freight charge across the Island	NTSP	Saptember 30, 2020

10.7 Strengthen offshore investment attraction efforts

To transform Puerto Rico into a more competitive destination for offshore investment, the Government should improve its funding for and oversight of Invest Puerto Rico (IPR), the Island's Investment Promotion Agency (IPA). Attracting job-creating investments is crucial to Puerto Rico, as the number of business establishments in Puerto Rico was already in decline before the 2017 hurricanes. 149 Jurisdictions across the globe have leveraged IPAs to attract offshore investments, fuel economic growth, and create jobs for their residents. 150 Effective investment promotion efforts are especially important in the aftermath of the COVID-19 pandemic. Off-Island investments (from both mainland and international companies) will play a crucial role in supporting economic growth and creating jobs necessary to help Puerto Ricans economically recover from the COVID-19 pandemic. Stronger investment promotion will also help ensure that the Island can effectively compete with mainland states and other countries for critical investments aligned to the Island's competitive advantages (e.g. pharmaceutical manufacturing, knowledge services, and hospitality and tourism) – increasingly important as companies look to shift their supply chains in the aftermath of the COVID-19 pandemic. 151

10.7.1 IPR in comparison to other IPAs

Unlike other IPAs, Invest Puerto Rico only has one mandate: attract offshore investment (primarily from the mainland) to the Island. For this purpose, IPR has an annual budget of \$5 million, \$1.4 million of which is allocated to investment promotion. ¹⁵² However, according to an analysis by the Organization for Economic Cooperation and Development (OECD) of IPAs in its member states, national IPAs commonly have about six individual mandates, including inward foreign investment promotion, export promotion, innovation promotion, regional

¹⁴⁸ Advantage Business Consulting, "Progress Report on Deregulation of Land Freight Rates," 2016.

¹⁴⁹ Puerto Rico Department of Labor and Human Resources, Bureau of Labor Statistics, "Puerto Rico Economic Analysis Report: 2015-2016," 2016.

¹⁵⁰ in Ireland, for example, the Industrial Development Authority (IDA) has helped secure investments from many of the world's top pharmaceutical firms and software companies, and more than 210,000 Irish residents—nearly 10% of the country's workforce—are employed by IDA client companies. See IDA Ireland, "Local impact"; the World Bank Group via International Labor Organization, "Labor force, total – Ireland," 2019.

¹⁵¹ Rapoza, "New Data Show US Companies are Definitely Leaving China," 2020.

¹⁵² For comparison, JobsOhio has an annual budget of \$134 million, Invest Atlanta of \$40 million, and Enterprise Florida of \$37 million. The average national IPA, meanwhite, as a budget of \$68 million (\$12 million of which is allocated to investment promotion) and the median national IPA a budget of \$12 million (with \$5 million allocated to investment promotion). See Organization for Economic Cooperation and Development, "Mapping of Investment Promotion Agencies in OECD Countries," 2018,

development promotion, and granting financial incentives.¹⁵³ Sub-national IPAs (such as IPR) often have many of these same responsibilities, as well as domestic investment promotion, issuing relevant business permits, and operation of a business one-stop shop.

10.7.2 Reform design parameters

The 2020 Fiscal Plan requires the Government to adhere to a set of parameters in order to fully empower IPR to effectively attract growth-generating and job-creating investments to the Island. Specifically, the Government must:

- Require IPR to publicly release performance data clearly illustrating the effectiveness of IPR's promotional campaign in bringing incremental and new investments to Puerto Rico.
- Ensure that IPR designs and implements a strategy to compete with mainland states and other economies for investments that arise as companies move to shift their supply chains to the US to minimize risk.
- Partner with DDEC and Discover Puerto Rico to develop an integrated strategy that leverages the US Department of Transportation (DOT) air hub waiver authorizing international air cargo and passenger transfers in Puerto Rico's international airports to foster economic development and spur tourism (if effectively utilized, the waiver is expected to generate \$30 million in additional payroll by 2022). The strategy must also increase the air hub waiver's likelihood of renewal in 2022. The strategy must also increase the air hub waiver's likelihood of renewal in 2022.
- Provide IPR with visibility into existing idle Government properties (e.g., abandoned industrial parks, factories, storage facilities) that could be leveraged by potential investors as they explore the possibility of running their businesses on the Island, and give IPR broker rights over those properties. This would allow IPR to present to investors a more compelling offer, as finding the right location to run operations in a new area is time-consuming and challenging. It could also provide IPR with a new source of revenue (through brokerage fees on each transaction) and help the Government leverage their unused properties. The team in charge of managing these properties currently sits in DDEC, but should be transferred to IPR (together with its corresponding budget) in order to empower the Island IPA with these additional responsibilities.

10.7.3 Reform targets

The 10-year collaboration agreement between the Department of Economic Development and Commerce (DDEC) and IPR establishes a set of multi-year performance targets. Despite the disruptions caused by the pandemic, the growing number of firms considering shifting their supply chains to the US to minimize risk in the aftermath of the pandemic—if well targeted—will ensure that IPR can meet or exceed its contractual obligations. As such, IPR should generate, by the end of FY2023, at least:

- 4,400 new businesses
- 26,000 new jobs

¹⁵³ These include inward foreign investment promotion (100% of IPAs), export promotion (56%), innovation promotion (56%), promotion of regional development (50%), green investment promotion (44%), domestic investment promotion (41%), granting financial incentives (31%), outward investment promotion (28%), trade facilitation (25%), and screening and approving investors (25%); see Organization for Economic Cooperation and Development, "Mapping of Investment Promotion Agencies in OECD Countries," 2018.

¹⁵⁴ Issued in February 2020, the waiver is expected to allow at least 10 new flights per day, creating 900 new jobs and increasing payroll by about \$30 million (according to a study by Estudios Tecnicos, Inc.).

¹⁵⁵ With Federal approval, the waiver can be renewed every two years.

- \$925 million in capital investments
- \$37,500 in average payroll committed by each new business

10.7.4 Current state and path forward

To-date, a lack of Government oversight and resourcing have undermined IPR's effectiveness. IPR has been unable to present any data—beyond incentive performance figures already collected by DDEC—documenting the effectiveness of its promotional campaign to either the Government or the Oversight Board. Furthermore, IPR has been hampered by inadequate Government support for its promotional efforts: DDEC allowed IPR to operate on reserve funds for more than eight months between 2019 and 2020 as the department drew out contract negotiations. To support IPR's promotional campaign as part of the broader effort to help the Island recover from recent natural disasters, Vivienda has allocated \$7 million in CDBG-DR funding to IPR.

To successfully implement investment attraction reform, the Government must accomplish the following action items by their respective deadlines:

EXHIBIT 65: REQUIRED IMPLEMENTATION ACTIONS FOR EFFECTIVE OFFSHORE INVESTMENT ATTRACTION

	Action item	DW	mer	Deadline
	 Identify KPIs that IPR withreport to AAFAF on a monthly basis 		IPR. AAFAF	May 30, 2020
To be completed before FY2021	 Develop clear list of larget sectors and companies that IPR will larget as it works to take advantage of efforts to rebalance supply chains toward the U.S. and capitalize on the DOT air hub waiver and discuss with Oversight Board 	•	IPR .	June 30, 2020
	 Establish air hub working group comprised of DDEC, DPR, IPR, Land Administration, Ports Authority, private sector business and manufacturing associations, and the Oversight Board to deslip an integrated economic development strategy that leverages the newly-issued DOT air hub waiver 	•	DDÉC	June 30, 2020
	Send KPI report to AAFAF	٠	IPR	Monthly from July 15, 202
	 Update 2019-20 promotional plan to clearly detail strategy to capture investments from companies rebalancing their global supply chains or able to capitalize on the air hub 	•	PR	July 30, 2020
	Publish annual performance report	•	PR	Annually from August 15, 2020
To be completed in	Design economic development strategy and share with Oversight Board		Worlding group	September 30, 2020
FY2021	Discuss economic development strategy and projected costs with Oversight Board	•	Working group	October 15, 2020
	Publish promotional plan for upcoming calendaryear	•	PR	Annually from December 15, 2020
	 Inventory idle Government properties (with detailed property amenities) that could be feveraged by polential mainland and foreign investors 	٠	DDEC	Decamber 15, 2020
	Value the inventoried properties in the Government portfolio to set their market potential	•	DDEC	December 15, 2020
	Transfer DDEC's Government management properly team and budget to IPR	•	DDEC	January 1, 2021
To be completed in FY2022 and	Provide the updated inventory of available properties for potential relocations	•	IPR	Monthly from February, 2021
beyond	Perform a market valuation of the inventoried properties to update their market value	٠	IPR	Annually from January, 2022

10.8 Prime tourism attraction efforts for success

To continue Puerto Rico's transformation into a leading Caribbean tourism destination, the Government must expand the mandate and resourcing of Discover Puerto Rico (DPR), the Island's Destination Marketing Organization (DMO). Despite its natural beauty and rich culture, Puerto Rico underperformed as a tourism destination even before the 2017 hurricanes. For example, the Island was ranked 55th in the 2015 Travel and Tourism Competitiveness Report—an independent assessment of the

strength of the tourism sector in 141 economies conducted by the World Economic Forum. 156 Destinations across the globe have leveraged DMOs to attract visitors, generate economic activity, and create jobs. 157 In Puerto Rico's case, DPR became fully operational in early 2019, when it launched its first promotional campaign and played an important role in driving record tourism performance in 2019. Effective management of on- and off-Island tourism marketing efforts will remain especially critical in the aftermath of the COVID-19 pandemic, which effectively crippled global tourism and the Island's industry and associated sectors (e.g. cruises) and is expected to reduce tourism employment in Puerto Rico by 37.5%. 158

10.8.1 DPR in comparison to other US and Caribbean DMOs

DPR has a smaller mandate and lower budget in comparison to other DMOs. The typical DMO markets to six distinct segments: visiting individuals and families; groups (e.g. family reunions); Meetings, Incentives, Conferences, and Exhibitions (MICE); events (e.g. major sports tournaments); local residents; and airlines (e.g. purchasing airline ads, subsidizing seats). DPR, however, is only responsible for marketing to individuals, groups, and MICE; PRTC continues to manage event, internal, and airline marketing. DPR also has a smaller budget than other Caribbean destinations—\$25 million (or \$943 per available hotel room) compared to an average budget of \$40.8 million (or \$1,485 per room) for Caribbean DMOs. 159

10.8.2 Reform design parameters

The Certified Fiscal Plan requires the Government to adhere to a set of parameters in order to enable DPR to capitalize on its early successes and continue leading the Island's emergence as a leading tourist destination. Specifically, the Government must:

- Transfer internal (i.e., local), airline, and event marketing responsibilities (and the corresponding operating budget) from PRTC to DPR to centralize all tourism marketing efforts within one organization
- Partner with DDEC and Invest Puerto Rico (IPR), the Island's investment promotion agency, to develop an integrated strategy to foster economic development that capitalizes on the recently-issued Federal Department of Transportation (DOT) waiver

10.8.3 Reform targets

DPR's initial performance indicates that the organization can effectively compete with top-ranked Caribbean DMOs and destinations in attracting visitors and growing the Island's tourism sector. As such, the 2020 Fiscal Plan requires the organization to meet targets that illustrate its effectiveness. Given the COVID-19 pandemic's impact on global tourism, however, no targets are in effect for FY2020-FY2021. The below targets will become

¹⁵⁶ The mainland, for comparison, was ranked 6th that same year. See World Economic Forum, Travel and Tourism Competitiveness Index 2015, 2015.

¹⁵⁷ For example, the Barbadian Tourism Product Authority (TPA), created in 2014, helped increase the travel and tourism sector's direct contribution to Barbados' GDP (5.4% contribution in 2015, 10.3% contribution in 2016) and employment (4.3% contribution in 2015, 9.8% contribution in 2016). The creation of a DMO in New Orleans, LA was linked to higher business activity in other nearby cities as higher tourism demand for flights to New Orleans facilitated economic development in surrounding areas. And, in Chicago, the creation of a DMO helped raise the city's business exposure, resulting in a partnership between the city's DMO and its World Business Chicago (WBC), the city's economic development agency, to promote the city as both a tourist and business destination. As a result, 70% of WBC marketing is conducted via Chicago's DMO; see Oxford Economics, "Destination Promotion: An Engine of Economic Development," 2014.

¹⁵⁸ Discover Puerto Rico.

¹⁵⁹ DPR, Destinations International.

¹⁶⁰ Targets are reduced in response to a projected 71% reduction in global air travel in 2020 (relative to 2019) and a 58% reduction in 2021 (also relative to 2019).

applicable starting in FY2022, once the post-COVID-19 global economic and travel trends become more clear:

- 5% year-on-year growth in the tourism sector's direct contribution to GDP¹⁶¹
- 5% year-on-year annual growth in direct contribution to employment 162
- 7% growth in average travel receipts per visitor per year ¹⁶³
- 8% growth in tourist visitors per year¹⁶⁴
- 12% growth in the number of meetings and conventions attracted to the Island per year 165

Additionally, DPR should prepare a scorecard illustrating how Puerto Rico compares to the top-ranked travel destination in the *Travel and Tourism Competitiveness Index* at the end of the first quarter of each fiscal year. ¹⁶⁶ This scorecard should be made publicly available on DPR's website and distributed to leaders of the Executive and Legislative branches, along with the Oversight Board.

10.8.4 Current state and path forward

The operationalization of DPR appears to have contributed to a successful recovery of the Island's tourism sector after the 2017 hurricanes. COVID-19 has had an enormous impact on global tourism and the Island's tourism sectors. As Puerto Rico looks forward, the Oversight Board is encouraged that, according to third-party travel data, Puerto Rico was moving the needle of growth in this sector pre-COVID-19. The tourism sector's contributions to GDP and Island-wide employment surpassed historic trends in 2019, 167 air arrivals and lodging demand reached record levels in 2019, 168 and DPR's media campaign is attributed for spurring higher spend and longer hotel stays among visitors. 169

To support DPR's promotional campaign as part of the broader effort to help the Island recover from recent natural disasters, Vivienda has allocated \$7.8 million in CDBG-DR funding to DPR. To successfully implement tourism marketing reform, in particular in light of the severe changes to the industry's future post-COVID 19, the Government must accomplish the following action items by their respective deadlines:

¹⁶¹ As measured by the World Travel and Tourism Council (WTTC).

¹⁶² As measured by the World Travel and Tourism Council (WTTC).

¹⁶³ Panama, the leading Latin American or Caribbean destination in this category as measured by the World Tourism Organization's "Yearbook of Tourism Statistics" (accessed via the World Bank Group's database), averaged 6.7% annual growth in tourism receipts (in USD) between 2009 and 2018.

¹⁶⁴ Peru, the leading Latin American or Caribbean destination in this category as measured by the World Tourism Organization's "Yearbook of Tourism Statistics" (accessed via the World Bank Group's database), averaged 8.4% annual growth in air arrival between 2009 and 2018.

¹⁶⁵ Argentina, the leading Latin American or Caribbean destination in this category as measured by the International Congress and Conventions Association's 2018 rankings, averaged 11.7% annual growth in in the number of international meetings and conventions attracted to the country between 2016 and 2018.

¹⁶⁶ For reference, an interactive version of Brazil's 2019 scorecard can be accessed at http://reports.weforum.org/travel-and-tourism-competitiveness-report-2019/country-profiles/#economy=BRA

¹⁶⁷ World Travel & Tourism Council, "Puerto Rico: 2019 Annual Research: Key Highlights," 2019.

¹⁶⁸ Aerostar, AirDNA, Discover Puerto Rico, Smith Travel Research. In 2019, Puerto Rico welcomed 5.2MM visitors (2016, the previous record-holder, had only 4.8MM air arrivals). Similarly, lodging demand reach 4.7MM units (in both hotels and independent lodging units), up from 4.6MM units in 2017.

¹⁶⁹ ADARA Impact, Arrivalist. Visitor exposed to DPR media stayed 4.8 days on average (vs. 4.3) and spent an average of \$217 on lodging per night (vs. \$199).

EXHIBIT 66: REQUIRED IMPLEMENTATION ACTIONS FOR EFFECTIVE TOURISM ATTRACTION

	Action item	Dwn≑t	Deadline
	 Establish air hub working group comprised of DDEC, DPR, IPR, Land Administration, Ports Authority, private sector business and manufacturing associations, and the Oversight Board to design an integrated economic development strategy that leverages the newly-issued DOT air hub waiver 	- DDEC	June 30, 2020
	Publish annual performance report	• DPR	Annually from August 15, 2020
	Create and share Puerto Rico's Travel and Tourism Competitiveness scorecard with Fortaleza, the Legislature, PRTC, and the Oversight Board	- DPR	September 30, 2020
,	Design air hub strategy and share with Oversight Board	Working group	September 30, 2020
	Discuss air hub strategy with Oversight Board	Working group	October 15, 202
	 Finalize all administrative and legislative changes required to transfer internal, airline, and event marketing responsibilities to DPR 	PRTC, Legislature	December 15 2020
	Publish promotional plan for upcoming calendar year	• DPR	December 15, 2020
	Transfer all internal, airline, and event marketing responsibilities and associated funding from PRTC to DPR	• PRTC	January 1, 2021

Chapter 11. Power sector reform

11.1 Introduction and context for energy reform

An affordable, reliable, safe, and resilient electric power service is essential for the island's economic growth and development. Electricity is a fundamental enabler of the people of Puerto Rico's livelihoods, and remains a critical service that needs to be safeguarded, particularly in light of the outsized catastrophic events in 2020 (e.g. January 2020 earthquakes, COVID-19 pandemic). And as an important element of household and business activity, electricity is also a critical factor for attracting and maintaining investment in Puerto Rico. The Puerto Rico Electric Power Authority (PREPA) has been responsible for providing electricity to Puerto Rico since 1941 and is a public corporation owned and operated by the government of Puerto Rico.

However, PREPA has been encumbered by numerous financial and operational issues. Over the years, PREPA has failed to update rates to cover base operating costs, neglected to invest in modernizing the system, avoided funding the pension system, and failed to provide customers with reliable services. Furthermore, PREPA incurred significant legacy debt obligations, failed to implement a long-term capital improvement program, and made decisions based on short-term political gains (e.g., avoiding modest rate increases), all of which have culminated in consistently poor and unreliable service.

This operating model has created an untenable financial situation for PREPA. Politicized management and volatile fuel prices — exacerbated by declining demand and an economic contraction — have resulted in PREPA's inability to service its debt, and ultimately resulted in

PREPA seeking PROMESA Title III bankruptcy protection in July 2017.¹⁷⁰ For more than a year prior to filing for bankruptcy, PREPA lacked access to the capital markets to help fund grid and generation modernization investments, further contributing to the poor quality of service experienced by the island's residents and businesses.

Underinvestment and underdevelopment of the grid, poor maintenance practices, and workforce losses all contributed to a chronically poor performing power sector. Puerto Rico has twice as many forced outages as the US industry average.¹⁷¹ PREPA also significantly underperforms against mainland utilities on multiple operational, reliability, and customer service metrics:

- PREPA's 2018 reliability metrics lagged behind those of US utilities in every area; SAIFI¹⁷² and SAIDI¹⁷³ metrics (frequency and system average interruption duration respectively) fall within the worst-performing 20 percent and 50 percent of US utilities, respectively, and CAIDI¹⁷⁴ is the third-worst out of 1,116 peer US utilities.¹⁷⁵
- Safety incidents are high by utility standards: PREPA recorded 10.7 safety incidents per 200,000 hours of labor in 2018 versus the US average of 1.7
- Even though tree-trimming conditions caused 35 to 45 percent of service interruptions in 2016,¹⁷⁶ PREPA lacks a comprehensive vegetation management strategy and has been slow to spend the allocated FY2020 budget for vegetation management.¹⁷⁷ In contrast, vegetation management is typically the largest spend category in US mainland utility operating budgets.¹⁷⁸

Over the next five years, the power sector in Puerto Rico must continue its transformation and modernization to support the delivery of reliable and affordable power. The Commonwealth must continue to implement a comprehensive energy sector reform to enable a successful transformation and unlock the resulting growth from Fiscal Plan projects. The successful transformation of Puerto Rico's power sector depends on:

- 1. Implementing regulatory reform: A strong and independent energy sector regulator is essential for injecting certainty and stability into the energy market, promoting much needed investments, and enforcing compliance with the energy sector transformation's objectives. In recent years, the framework of regulatory reform has been approved and an independent regulator (i.e., PREB) has been established. The focus in coming years will be continuing to support the independence of the regulator and enabling the regulator to execute on its mandate. This will be accomplished by developing and strengthening the regulatory framework and promoting greater transparency and accountability.
- 2. Transitioning the operation and management of PREPA's electricity grid and generation assets to private operators: Attracting a private operator to manage and operate Puerto Rico's Transmission and Distribution (T&D) network will improve operational performance and customer service, support rigorous capital project execution

^{170 &}quot;Puerto Rico's Power Authority Effectively Files for Bankruptcy", New York Times, 2 July 2017

^{171 *}A review of PREPA's generation patterns reveals that PREPA, in fact, increased its reliance on the diesel generation fleet in FY2015 and FY2016, doubling its use of distributed generation turbines and tripling its use of the diesel Aguirre CC plant.* Fisher and Horowitz, revised November 23, 2016, Expert Report, 21.

¹⁷² System Average Interruptions Frequency Index (SAIFI)

¹⁷³ System Average Interruptions Duration Index (SAIDI)

¹⁷⁴ Customer Average Interruptions Duration Index (CAIDI)

¹⁷⁵ North American Electric Reliability Corporation, "Generating Unit Statistical Brochure 4 2014-2018 – All Units Reporting," (Excel data set, July 30, 2019), on "Generating Unit Statistical Brochures," accessed January 23, 2020.

^{176 &}quot;.[PREPA] describes itself as always playing a catch-up game on maintenance — following outages, instead of improving the fundamental system." Fisher and Horowitz, Expert Report, 33.

¹⁷⁷ PREPA, "Professional & Technical Outsourced Services," B2A YTD-Expenses, Budget to Actual Variance Report for the Fourth Quarter of Fiscal Year 2018-2019, (data set, June 30, 2019).

^{178 &}quot;Vegetation Management: Not Sexy, but Vitally Important," Smart Energy International, last modified February 8, 2019.

to modernize the system, strengthen grid resilience, and ensure ongoing fiscal balance and control. In early 2019, Puerto Rico's Public-Private Partnership Authority (P3), began an ongoing process to evaluate potential private operators to assume responsibility for managing and operating the T&D system. A similar process will be undertaken to select potential private operator(s) of PREPA's generation assets.

3. Restructuring legacy debt obligations: In order to fund the transformation of Puerto Rico's power sector, PREPA will require access to capital markets. Given the utility's significant legacy debt obligations, a sustainable restructuring plan is necessary for PREPA to exit bankruptcy and regain access to credit. Without restructuring, customers will experience higher rates, resulting from repayment of a higher debt burden and risk premiums associated with bankruptcy. Ultimately, successful restructuring of outstanding bonds and debt obligations will allow PREPA to achieve its transformation goals, thus modernizing Puerto Rico's power grid, and passing on subsequent efficiencies and cost savings to end users.

PREPA's Fiscal Plans and the government of Puerto Rico's energy sector regulations ¹⁷⁹ lay out the transformation road map. If successfully implemented, a reformed energy system will lead to a modernized and reliable energy service across the island: a diversified fuel mix and reduced fuel costs, anchored on low-cost generating resources which reduce price volatility; increased operational efficiencies; and a well-funded, financially sustainably utility. These outcomes will benefit the customers and businesses of Puerto Rico in enabling a more affordable, reliable, and safe electricity service.

11.2 Energy regulatory reform and oversight

The current regulator of the power sector in Puerto Rico is the Puerto Rico Energy Bureau (PREB), which has been operational since its creation by Act 57-2014. PREB has the responsibility to "regulate, monitor, and enforce the energy public policy of the Commonwealth of Puerto Rico."

As Puerto Rico's energy sector is transformed into a vibrant, modern system, PREB will continue to be responsible for the development of a robust regulatory framework that will promote prudent investments by utilities, increase quality of service to customers, and ensure industry trends and technological advancements are appropriately incorporated into Puerto Rico's energy system. To that end, PREB's regulatory oversight will directly impact the utility and have significant influence on Puerto Rico's energy sector. To fully achieve its purpose, PREB should remain financially independent from the Government and its decisions, and its determinations should be free from any political influence or interference.

Currently, PREB shares oversight role of the power sector with the Oversight Board. The following section provides a description of what PREB's roles and responsibilities will be in the long-term as well as the near-term delineation of oversight responsibilities shared with the Oversight Board. Additionally, a few structural elements are recommended to ensure PREB becomes a best-in-class regulator.

11.2.1 Long-term mandate, authorities, and expertise for the energy sector regulator

To be effective, PREB's regulatory authority and its mandate to promote an efficient, reliable, resilient, and customer-responsive energy system must be clear and well-established. In a transformed energy system state, PREB's responsibilities can be categorized as (1) rate setting,

¹⁷⁹ Puerto Rico Energy System Transformation, Act No. 120-2018; Puerto Rico Energy Policy Act, Act No. 17-2019

(2) Integrated Resource Plan (IRP) approval and compliance, (3) protecting customers, and (4) ensuring workforce safety.

Rate setting: PREB should "review and approve and, if applicable, modify the rates or fees charged by electric power service companies in Puerto Rico." 180 In doing so, PREB should ensure rates and rate structure are rational and predictable, minimize risk and "rate shock", and create incentives to support equitability and economic development. PREB should set a clear, transparent, and efficient process for rate cases. All rate adjustments and revisions must be approved by PREB before enactment. In this capacity, PREB must ensure that necessary operational frameworks are in place to not only provide a robust review process in line with best-in-class mainland US state regulators (e.g. New York), but also ensure that rate reviews are conducted efficiently and in a manner that does not adversely impact service performance or consumer confidence.

In future rate cases, PREB should encourage several core principles to be incorporated including dynamic rate structures (e.g., time of use, rate decoupling, unbundling), prudency of investments, cost of service, and distribution of cost and revenue allocation.

Integrated Resource Plan (IRP) approval and compliance: PREB is mandated to "review and approve policies and strategic plans...in connection with energy resources integrated planning in Puerto Rico, and oversee compliance therewith." During review, PREB should assess related policies and plans on whether they meet the objectives of Puerto Rico's energy public policy and promote energy service reliability, safety, efficiency, and affordability. During implementation of the plan, PREB should fulfill its role of ensuring there are no impediments to the integration of renewable resources, establishment of demand response or management, and adoption of energy efficiency programs.

Protecting customers and customer service: PREB should be responsible for ensuring customers are reasonably protected in the energy system for factors such as affordability, information accessibility, and quality of service. This includes reviewing potential policies, rates, and capital projects for their potential effects on customers, and ensuring impacted customers understand and have the ability to respond in due course. Ultimately, PREB and the *Oficina Independiente de Protección al Consumidor* (OIPC)¹⁸², as part of the Regulatory Board of Public Services, hold the responsibility of evaluating and providing determination in all cases of consumer complaints regarding pricing and quality of services provided by PREPA.

Ensuring safety: PREB is responsible for ensuring the safe operation of Puerto Rico's utilities for workers and the public. This is particularly important given the high number of safety incidents PREPA has experienced by American utility standards (PREPA recorded 10.7 safety incidents per 200,000 hours of labor in 2018 versus the US average of 1.7). PREB should develop a comprehensive safety plan addressing overall safety culture at regulated entities and ensure that utilities have sufficient resources to comply with these plans. Finally, PREB should establish, track, and analyze key safety performance metrics, and monitor the effectiveness of utility safety programs.

11.2.2 Expertise

To implement its long-term mandate in a robust and effective manner, PREB should build expertise on topics that reflect the core regulatory priorities facing most regulators:

Generation planning and dispatch

^{180 &}quot;ABOUT THE PUERTO RICO ENERGY BUREAU" https://energia.pr.gov/en/about-the-commission/.

^{181 &}quot;ABOUT THE PUERTO RICO ENERGY BUREAU" https://energia.pr.gov/en/about-the-commission/.

¹⁸² Independent Office for Consumer Protection (IOPC)

¹⁸³ PREPA, 2019 Fiscal Plan, 30

- T&D reliable operations and capital planning
- Workplace safety
- Customer service
- Rate-making

In addition, PREB can build expertise in topics that are increasingly addressed by regulators across the mainland so that Puerto Rico's energy sector is able to match pace with best-inclass utilities. By doing so, PREB can provide proper guidance to sector players on how to secure, modernize, and efficiently operate the grid. These topics include:

- Contribution-in-lieu of taxes (CILT)
- Renewable energy integration (distributed and commercial)
- Weather-related risks (e.g., hurricanes, climate change)

11.2.3 Authorities for the energy sector regulators during transformation

Until the transformation of the energy system is complete, it is important to clearly delineate the role of the Oversight Board and PREB with respect to energy sector regulation. The table below describes the role of each entity during the transition period:

EXHIBIT 67: ROLES OF THE OVERSIGHT BOARD AND PREB DURING THE TRANSITION PERIOD

	Oversight Board	PREB
IRP	Approves revenue requirements and expenditures in the Fiscal Plan for PREPA. PREPA's Fiscal Plan should be informed by the results of the IRP and provide a clear framework for executing the modernization of generation resources.	Approves the IRP. The IRP process shall be open and transparent so that third parties can understand inputs and methodologies behind each scenario, and be able to perticipate and attend hearings to understand the decisions driving approval of the final capital plan and revenue requirement.
Budget and rate. making	Approves a yearly budget for PREPA that aligns with PREPA's Fiscal Plan and thus should align with revenue requirements and expenditures.	Authorize rates (either formulaic or on an expedited manner) which align with the budget as certified by the Oversight Board.
Utility debt	Approves restructuring of existing debt through the Plan of Adjustment for PREPA.	No authority
Liquidity management	Oversees liquidity management in the energy system, to ensure that consistent and quality energy service to customers is not disrupted.	No authority
Title III	As the representative of PREPA in Title III, the Oversight Board has the exclusive right to file a Plan of Adjustment, which will contain any transformation-related agreements	No authority
Transition to Privately Managed Operations	Approves any operator that engages with PREPA (e.g., T&D and generational operators). After the operators have been installed, the Oversight Board will continue to ensure compliance with PROMESA and the energy sector transformation objectives. The interaction between PREPA, the operators, and the Oversight Board will be determined at a later date.	No additional authority beyond PREB's existing oversight over PREPA, including the issuance of an Energy Compliance Certificate, as required under Act 120-2018
Other	Track PREB's actions around distributed generation, net metering, and CILT to ensure the regulator is providing proper oversight over these critical topics	Continues to exercise duties and responsibilities (e.g. addressing distributed generation, net metering, and CILT) as outlined in its enabling laws, except when doing so is inconsistent with the powers and authorities delegated to the Oversight Board under PROMESA.

11.2.4 Structural elements to ensure a best-in-class regulatory agency

Although administratively located within the Puerto Rico Public Service Regulatory Board (PSRB), PREB's decision-making process should not be subject to direct or indirect review by other government entities, except for any review under applicable administrative procedure

rules. Staff involved in substantive decision-making should be kept separate and independent from the PSRB and be fully dedicated to matters within PREB's jurisdiction and purview. PREB may, on an annual basis, provide funds to the PSRB to cover administrative and other operational costs, however, PREB's resources should be kept separate and shall not be controlled or placed under the direction of the PSRB.

There are five key structural elements that will ensure PREB is a best-in-class regulatory agency:

- Governance: It is imperative that PREB's governance structure enable quick and robust decision-making. In line with best practices for regulatory commissions (e.g. California Public Utilities Commission, Hawaii Public Utilities Commission, New York Public Services Commission), PREB is headed by five commissioners who serve staggered sixyear terms. The commissioners are appointed based on their technical, professional and/or academic credentials, with potential candidates identified and appointed through a candidate list developed by an external recruitment firm. The commissioners should be supported in their oversight role by professional civil servant staff that has utility expertise.
- Independent ratepayer advocate: All commission decisions in adjudicatory proceedings must comply with applicable requirements of administrative procedure. Separate from the regulator, there shall be an independent ratepayer advocate, a role currently filled by the Oficina Independiente de Protección al Consumidor (OIPC). OIPC should be well-funded so that it has the resources to meet its responsibilities. Currently, PREB transfers 10% of its budget to OIPC; as priorities evolve and the need for a robust consumer advocate increases, the government may with the approval of the Oversight Board provide OIPC with additional funding.
- Employee structure: Presently, PREB must develop and implement a plan for transitioning from its existing employee structure to a structure comprised of no less than 75% civil servant employees and no more than 25% trust employees. 184,185 In the future, PREB must minimize the percentage of trust employees to 15%, and ultimately 10%. 186 During and after the energy sector reform process, PREB must have enough staff to effectively undertake its duties and responsibilities in a timely and professional manner. The selection, hiring, and management of PREB's staff must not be subject to review or approval by any other entity of the Executive or Legislative Branch.
- Budget: PREB's substantive independence must be supported by financial independence. Under current law, PREB's yearly budget is set at \$20 million and collected through charges assessed on certified energy companies. 187 To provide for a steady and predictable funding source, PREB's enabling act must be amended to provide that PREB's budget shall be funded entirely through rates, as part of the revenue requirement used to determine energy rates. PREB's funds are then collected by the T&D operator through customer bills and periodically remitted to PREB. This funding mechanism is consistent with the mechanisms used to fund peer mainland regulators. Providing for an independent and unencumbered source of income for PREB helps create the conditions to protect ratepayer interests, increase transparency, and reduce system costs. PREB's budget and funding must be kept separate and independent from the Commonwealth budget or the budget of any other Commonwealth agency, entity, or instrumentality, and neither the Executive nor the Legislative branches shall have authority to modify PREB's budget or reapportion any of PREB's funds without PREB's prior consent. However, PREB is subject to periodic

^{184 &}quot;Trust employees" includes any employees that are related to political appointments, non-civil service appointments, etc.

¹⁸⁵ To show that this has been completed, PREB needs to submit an organization chart showing the split of employees (civil servant vs. trust) no later than the end of Q1 of FY2021.

¹⁸⁶ Relevant milestones and deadlines are shown in Section 11.5, Exhibit 68, and Exhibit 69.

¹⁸⁷ Amount in line with other jurisdictions; the Hawaii Public Utilities Commission had revenues of \$19M in FY2017 to serve a population of 1.4 million.

reviews from relevant authorities for use of public funds, which is consistent with all other government agencies in Puerto Rico.

Transparency: To achieve best-in-class status as an energy system, transparency is an indispensable factor. PREB must ensure that proactive transparency permeates relevant energy operations (i.e., this should exclude confidential information such as customer data and operational details that would increase cyber or risk vulnerabilities, etc.). This may include making information publicly accessible, maintaining quick and efficient decision-making, and holding public events when appropriate in order to consider public opinion. Additionally, PREB must uphold transparency in its own financials and operations, including disclosing how it utilizes its annual budget.

11.3 Vision and structure for an energy system operator

Private operators for T&D and generation operations will be responsible for executing Puerto Rico's energy system modernization strategy as well as assisting with the allocation of related federal funding. Each private operator's overall objective will be to improve service quality and deliver reliable service at just and reasonable prices. As such, a private operator will be motivated to deliver financial and operational performance improvements across five dimensions:

- Reduced costs by introducing experienced personnel. A private operator would be incentivized to reduce PREPA's dependency on outsourced contracts by insourcing activities, empowering the local labor force, and potentially achieving economies of scale.
- Upgraded technology. While PREPA has limited access and experience with industrystandard technology, a private operator would be incentivized to deploy modern grid technologies, digital capabilities, and infrastructure to significantly enhance operational efficiency, thus lowering O&M costs and customer rates over time through better asset utilization.
- Improved processes and procedures. Drawing on operational expertise, a private operator would be incentivized to streamline and standardize critical management processes and implement operational efficiencies (e.g. processes such as procurement, contract management, maintenance, etc.). A private operator can also leverage experience in customer service to improve PREPA's responsiveness to customer needs and expectations.
- Limited political interference. A private operator's decisions would be subject to independent regulatory oversight, but free of political interference. This would lead to the adoption of standard industry practice where experienced utility operators make operational decisions with oversight from an independent regulator (e.g., investment decisions made based on overall benefit to the system, instead of short-term political gains).
- Effective and efficient capital delivery. A private operator would be incentivized to establish the tools and processes critical to improving PREPA's capital project management. This will be key to unlocking the federal funding required for grid modernization improvements, which in turn will aid PREPA in strengthening grid resilience.

11.4 Energy sector debt restructuring

As of May 2017, PREPA had \$9.25 billion of outstanding bond and other debt obligations, and an unsustainable repayment schedule; PREPA would have had to repay approximately \$4.5

billion of debt service obligations between FY2019 and FY2023. PREPA's unsustainable capital structure reflects persistent operating deficits, resulting from overly low base rates and high operating costs. As long as PREPA remains in bankruptcy, it poses a risk to suppliers and partners, potentially increasing costs and delaying progress in rebuilding after major catastrophic events (e.g. hurricanes, earthquakes, COVID-19).

To restructure PREPA's debt, a debt restructuring agreement among a group of PREPA creditors, the Oversight Board, the Government, and PREPA is in progress. However, as a result of the uncertain and unpredictable effects of COVID-19 on PREPA and its customers, the Oversight Board has requested delays in the court process to assess and understand the implications of COVID-19 on the bankruptcy process.

11.5 Implementation and enforcement of power sector reform

To achieve Fiscal Plan savings projections, several reforms to the power sector must be implemented immediately. Several of those measures recommended in earlier Fiscal Plans already have been completed and are listed in *Exhibit 68*.

EXHIBIT 68: COMPLETED MILESTONES FOR POWER SECTOR REFORM

Area of focus	Action item	Responsible party	Complete	ed
Implement regulatory reform	Provide interim feedback on PREPA's Integrated Resource Plan (IRP)	PREB	August 2018	14
	Remove CW government approval needed for PREB staff appointments	CW government	April 2019	11
	Revise charter legislation to provide dedicated funding for power sector regulation that provides regulator with annual budget of \$20 million in line with benchmark	CW government	Decembe 31, 2018	
Transition to private operators	Perform market sounding to collect feedback on interests and concerns from interested parties for generation asset privatization	P3 Authority / Oversight Board	Decembe 2019	∌ı

Exhibit 69 describes the additional reforms required to ensure the transformation of the electricity sector and compliance with the Fiscal Plan, and to meet the Fiscal Plan growth and revenue targets. Several of these reforms were outlined in the June 2019 PREPA Fiscal Plan and remain incomplete (demarcated with *).

EXHIBIT 60:	DENIDING MIL	ESTONES FOR	POWER	SECTOR	REFORM
LATHER UZ.				VII (1 V V V	13 1 3 71 3 10 10 1

Area of focus	Action item	Responsible party	erty Deadline	
	Appoint the remaining PREB commissioner to serva staggared six-year terms*	CW government	Saptember 2020	30
	Increase number of PREB staff in line with appropriate benchmarks*	PREB	June 30, 2021	
	Amend PREB enabling act (Act 57-2014) to stipulate that PREB's budget will be funded through rates	PREB	June 30. 2021	
	Reduce the percentage of trust employees to 15% of total employees	PREB	June 30, 2021	
	Reduce the percentage of trust employees to 10% of total employees	PREB	June 30, 2022	
	Conduct a study and issue a recommendation to the Legislature on optimal CILT structure '	PREB	September 2020	30,
	Develop a CILT process by which municipalities pay for electricity consumption not covered by CILT, and are able to file complaints related to CILT.	PREB	December 2020	31
	Approve IRP	PREG	in process	
	Select a winning proponent to manage and operate PREPA's T&D system*	P3 Authority	May 31, 2020	
	Prepare for and faunch RFQ for the selection of a proponent for PREPA's generation assets	P3 Authority	June 15, 2020	
	Prepare for and Jaunch RFP for the selection of a proponent for PREPA's generation assets	P3 Authority	October 15, 20	20
	Select a winning proponent to manage and operate PREPA's existing generation assets	P3 Authority	April 15, 2021	
	Implement recommended operational initiatives outlined in certified liscal plan for PREPA to ensure operational and financial efficiency	PREPA	June 31, 2021	
	Implement approved IRP and grid modernization plan to ensure a modernized, resilient, and reliable grid.	PREPA	Ongoing	
	Confirm Title III plan of adjustment	FOMB	To be determin	ed
	Implement PREPA plan of adjustment	PREPA	To be determin	ed

Chapter 12. Infrastructure reform

Relative to the mainland US, Puerto Rico's infrastructure outcomes rank near the bottom in terms of quality. For example, the percentage of road pavement in good condition is 11% in major highways and 1% in smaller traffic arteries, significantly underperforming the average of the mainland US (81%). 188 The poor state of transport infrastructure has contributed to congestion and thus impacted the ease of doing business on the Island. Improving the efficiency and effectiveness of infrastructure and capital investments is critical to improve mobility on the island, increase convenience for residents, and lower the costs for business. Improving these outcomes will enhance the island's competitiveness and the ability to attract and retain population and investment.

Current state of infrastructure and capital investment 12.1

Infrastructure investment as a percentage of GDP decreased from 3.3% in 2000 to 1.2% in 2018, indicating a lack of recent experience in large-scale building. 189 The Government also has a history of failed large-scale projects. For example, Tren Urbano was scheduled to open on July 1, 2001 after beginning construction in 1996; it finally opened in 2005 and the budget for the project increased more than 60%, from \$1.38 billion to \$2.25 billion.

[&]quot;Measones also recommended in June 2019 Facel Pace."

This is revised from the original deadline in Act 17-2019, which stipulates that "in view of this new model fir an Electrical System, on ordefine Discension 31, 2019, the Energy Bluedu. shall conduct a study on the implementation, lettectiveness, cost-benefit reasonableness, and economic mode; of the contribution in law of taxes (CLT) to determine the need and convenience if any, of reforming this mechanism and the subsidies

¹⁸⁸ https://www.fnwa.dot.gov/policyinformation/statistics/2016/hm64.cfm

¹⁸⁹ American Society of Civil Engineers, 2019 Report Card for Puerto Rico's Infrastructure

In addition to the challenges with infrastructure delivery and maintenance, the poor state of transport related infrastructure is a key constraint on mobility. Puerto Rico is ranked 51st out of 52 jurisdictions for quality of roads (percentage of roads in poor conditions), while urban congestion is particularly problematic in the San Juan metropolitan area and on major highways. San Juan is the 25th most congested city in the US according to the INRIX 2019 Traffic Scorecard Report with 46 hours yearly lost per driver in congestion during peak commute periods compared to free-flow conditions, resulting in ~\$400 million of annual commuter cost. 191

Improving traffic on major highways, such as PR-52 and PR-18, is critical to enhancing growth. A 25% reduction in travel time for trips coming into and out of the central business district can reduce travel cost by over 6% (NCHRP Report 463). Investments to reduce congestion should prioritize the most economically important trips or provide alternative travel capacity to enable access despite congestion (Sweet, 2013). Targeted investments, such as "smart intersections", dynamic tolls and reversible lanes using movable barriers will reduce delays on key routes and journeys and facilitate economic growth. 192

However, Puerto Rico still has a lot of work to do in order to transform its transportation delivery organizations, enabling them to meet the standards set by other states in the US mainland. Such a transformation effort would mainly revolve around the following key initiatives:

- 1. Prioritizing projects with the highest long-term benefit-cost ratios, taking into account a variety of monetizable and non-monetizable benefits
- 2. Systematically leveraging private sector capabilities to improve overall public outcomes, thereby supporting and growing the private sector as well
- 3. Promoting the creation of a unified transport system for the San Juan metropolitan area through an integration of public transit agencies and a closer collaboration with private network operators

12.2 Implementation of infrastructure reform

The Government should employ infrastructure delivery best practices (e.g. prioritization of projects for economic impact, fast-track permitting, procurement reform). Competitive processes need to be engineered into the capital budgeting process for Puerto Rico. Competition between capital projects helps assure that scarce resources are used effectively and equitably. This is achieved by establishing appropriate processes, procedures, definitions, information and analytic requirements, roles of actors, submission requirements, review criteria and programming responsibilities. All of these require formal capital budgeting practices and the elimination of the ad hoc practices.

These best practices improve efficiency and transparency and should be applied to all areas of infrastructure expenditure of the Commonwealth including: reconstruction, construction and maintenance of government owned assets, and procurement of infrastructure through public corporations and Public-Private Partnerships (P3s) and coordinated by COR3.

A timeline for the implementation of infrastructure reform can be found below (*Exhibit 70*). The Government must fulfill the milestones of this timeline to comply with the Fiscal Plan and

¹⁹⁰ https://www.statista.com/statistics/907676/infrastructure-road-conditions-in-the-us-by-state/, 2019 HTA reports 191 http://inrix.com/scorecard/

¹⁹² See, Jamal Haidar, "The impact of business regulatory reforms on economic growth," Journal of the Japanese and International Economies, Vol 26, 2012, pp. 285-307. In addition, there are several studies that review the impact of decongestion of roads on growth. Two examples are: New Zealand Institute of Economic Research, Benefits from Auckland road decongestion, July 2017, and Clifford Winston and Quentin Karpilow, A New Route to Increasing Economic Growth Reducing Highway Congestion with Autonomous Vehicles, Mercatus Working Paper, January 2017

to remedy the main flaws of the current transportation landscape on the Island (i.e., the significant congestion of major traffic arteries, the poor condition of highway infrastructure, and the inefficiencies in the operation of transportations assets). Concerns around the roll-out of Commonwealth-wide procurement best practices and the establishment of standardized, objective project prioritization goals remain and should be promptly addressed:

EXHIBIT 70: IMPLEMENTATION TIMELINE FOR INFRASTRUCTURE PROCESS REFORM AND CAPITAL IMPROVEMENT PLAN DELIVERY

Action rtem	Responsible party ¹	Deadline	
Define and publish main orderia for infrastructure project pnoritization	HTA/ DTOP/ PRITA	November 30, 2020	
Analyze projects and rank them according to their promotion of the promitted criteria	HTA/ DTOP/ PRITA	January 31, 2021	
Conduct a diagnostic of pre-construction process, identifying potential bottlenecks	HTA DTOP/PRITA	February 28, 2021	
Identify best practices to overcome outlienecks and leverage them to accelerate pre-construction process	HTA) DTOP/ PRITA	February 28, 2021	
Conduct a diagnostic of external funding opportunities and pursue these opportunities with a robust FDI promotion strategy	HTA/ DTOP/ PRITA	May 31, 2021	
Compile a list of regulatory barriers to the optimization of domestic funding apportunities and remove these barriers with legislative action (e.g., fine rationalization)	HTA/ DTOP/ PRITA	May 31, 2021	
Determine opportunities to make contracting strategies more cost- effective	HTAV DTOP/ PRITA	July 31, 2021	
Leverage these apportunities in pilot projects and assess the resulting outcomes	HTA/ DTOP/ PRITA	October 31, 2021	
Introduce dynamic to it lanes and optimize traffic signating to manage congestion that are currently under construction	HTAV AAFAF	January 31, 2022	
	Define and publish main criteria for infrastructure project prioritization Analyze projects and rank them according to their promotion of the prioritized criteria Conduct a diagnostic of pre-construction process, identifying potential bottlaneicks Identify best practices to overcome obttlenecks and leverage them to accelerate pre-construction process Conduct a diagnostic of external funding opportunities and pursue these opportunities with a robust FDI promotion strategy Compile a list of regulatory parriers to the optimization of domestic funding opportunities and remove thas a barriers with legislative action (e.g., fine rationalization) Determine opportunities to make contracting strategies more cost-effective Leverage these opportunities in pilot projects and assess the resulting outcomes	Define and publish main orderia for infrastructure project phoritization Analyze projects and ranktitiem according to their promotion of the phoritized criteria Conduct a diagnostic of pre-construction process, identifying potential bottlenecks Identify best practices to overcome authenticks and leverage them to accelerate pre-construction process Conduct a diagnostic of external funding apportunities and pursue these apportunities with a robust FDI promotion strategy Compile a list of regulatory parriers to the optimization of domestic funding apportunities and remove these barriers with legislative action (e.g., fine rationalization) Determine apportunities to make contracting strategies more cost. HTA/ DTOP/ PRITA Leverage these apportunities in pilot projects and assess the resulting outcomes Introduce dynamic to these and optimize traffic signaling to manage HTA/ AAFAF	

12.3 Implementation of public transportation reform

The state of transit on the Island deserves special focus. Transit has particularly low mode share, reflecting its poor performance, especially to the detriment of Puerto Ricans without the means to own a private vehicle. Further shifting demand from more space-intensive to less space-intensive means is over the long-term one of the only enduring ways to fight congestion that is stifling economic development. The Government should promote the establishment of a unified island-wide transport system, which would give all Puerto Ricans access to a reliable way of travelling from one city to another for leisure or business, thus bolstering economic activity in the San Juan metropolitan area and beyond while decreasing environmental impacts of travel and congestion. Although these initiatives would ideally be implemented by an integrated PRITA, their implementation can and should start today.

The creation of such a system would mainly rely on the implementation of the following initiatives:

■ Integrate all transit assets under PRITA: PRITA should be empowered to fulfill its original intention, and act as a unitary transit authority by managing all transit on the island (e.g., all buses, ferries, Tren Urbano). The Ports Authority would continue to retain control over airports and ports. As a result, the Government can help PRITA pursue federal grantee status as these new roles and responsibilities require (e.g., FTA grantee status).

- Integration of public transit networks: Even before the creation of a unified agency in charge of transit in the Island, the existing public transit agencies of the San Juan metropolitan area must integrate their operations to maximize ridership by increasing both the legibility and usefulness of the system. Example initiatives include:
 - Adoption of a single farecard for all transit networks, in order to give the residents of the San Juan metropolitan area the opportunity to store their balances in one location and to use the same form of payment across different systems.
 - Harmonization of fares and schedules across TU, buses and ferries, in order to enable commuters to transfer from one means of transport to another without time delays or other obstacles.
 - Design of a coordinated network of routes, in order to expand the combined coverage area of public transit and to increase the attractiveness of multimodal mobility, creating high-frequency trunks, with timed transfers to a useful branch network.
 - Pooling of data resources, in order to conduct common research on the design of new initiatives, such as the creation of a master time schedule and of a coordinated route network. Pooled schedule data will also facilitate the creation of unified transit apps that make it easier for users to navigate the system.
 - Redesign of the physical landscape around transit stations in order to a) make stations
 more accessible to pedestrians and b) increase the visibility and attractiveness of
 stations in the broader community.
- Coordination of public transit systems with private transport networks: Public transit agencies should also collaborate more closely with private transport networks (e.g. Públicos, Transportation Network Companies), which carry ~50 million passengers per year and carry the vast majority (65%) of total transit rides in the San Juan metropolitan area. 193 If public agencies and private network operators were to implement a series of joint initiatives (e.g., fare integration, station re-design, schedule integration, multi-modal trip planning), transit service quality would increase, leading to a likely increase in ridership as well. For example, commuter rides would become faster since San Juan residents would be able to benefit from the extensive networks of private operators as well as from the speed of public assets such as TU, which avoids gridlock.
- Improvement of curb management practices: Public transit agencies should work with the Government and local municipal authorities to promote the adoption of innovative curb management practices (e.g., dynamic pricing for on-street parking, replacing on-street parking with drop-off zones). These practices would raise the cost of car usage and would incentivize commuters to use public transit. They would also generate funds that could improve service quality in the communities they service (e.g., construct more and better bus shelters)

Overall, these initiatives would contribute to the decrease of average commute times for the residents of the San Juan metropolitan area, thus resulting in substantial labor productivity gains. At the same time, they would enable public transit networks to increase their ridership and their revenue, thus having a smaller need for subsidies from FTA or the Government. These measures should be led by agencies responsible for various assets (HTA, ATM, PRITA) until the transformation of PRITA into a true transit authority is complete, at which point PRITA should become the responsible party across assets.

¹⁹³ Data comes from FY2011 actuals included in the Puerto Rico Long Range Transportation Plan, published in December 2013

EXHIBIT 71: IMPLEMENTATION TIMELINE FOR PUBLIC TRANSPORTATION REFORM¹⁹⁴

Measure	Action riem	Responsible partyl	Deadline	
Integrate Iransk assets under a unified PRITA	Compile a comprehensive list of assets that will be transferred to PRITA and create a legal framework to formalize new institution with designated funding for subsidized assets, as necessary, submit to legislature	PRITA , DTOP, HTA, ATM, AAFAP	December 31, 2020	
	Approve Tegislation for new transitiasset organization	CW Government	January 31, 2021	
Assess infrastructure priorities and prioritize investments	Adopt a single farecard for all public transit networks	HTA, ATM. PRITA	December 31, 2020	
	Harmonize fares and schedules across TU, buses and ferries	HTA, ATM, PRITA	December 31, 2020	
	Pool data resources in order to conduct common research on future initiatives	HTA, ATM, PRITA	December 31, 2020	
	Design a coordinated network of public transit routes	PRITA	March 31, 2021	
	Begin redesigning the physical landscape around transit stations	PRITA	December 31, 2021	
Promote delivery best practices	Design a series of initiatives that could be implemented in collaboration with private transport networks (e.g., Públicos)	PRITA	December 31, 2020	
	Develop a strategy of reacting out to private transport network operators	PRITA: Public Service Bureau, Private third-party stakeholders	January 31, 2021	
	Establish partnerships with private transport networks and begin executing joint initiatives (e.g., schedule integration) to boost ridership	PRITA	April 30, 2021	
nvest in innovative Iransportation projects	Identify existing curb management practices that Incentivize Puerto Ricans to utilize mass transit infrastructure	PRITA	December 31.2021	
	Introduce new legal/regulatory framework in order to eliminate these curb management practices that disincentivize use of transit	PRITA	January 31, 2022	

¹⁹⁴ In the event the transformation of PRITA has not yet been complete, the agency should still take a leading role in the design processes laid out above

PART V: Transforming government to better serve the Island

In addition to structural reforms, the Government must also implement fiscal measures to create a sustainable fiscal future for Puerto Rico. Fiscal reforms should reduce costs while maintaining or improving the quality of important services. The wide range of government efficiency initiatives shall target an increase in revenues through new and more efficient collections activities, while decreasing government expenditures by ensuring reasonable usage of resources.

While the Government has successfully maintained balanced budgets established by the Fiscal Plans, it has been slow to make meaningful progress regarding the necessary measures to sustainably reduce the cost of operations by transforming its processes and organizational structures. This has created a precarious risk to government service delivery, especially given recent earthquakes and the COVID-19 crisis, when Puerto Rico's population is more reliant on the Government to effectively and efficiently provide them the public services that enable life to proceed and the economy to recover. While the Oversight Board continues to believe that incremental government efficiency measures included in the 2020 Fiscal Plan are of the utmost importance for the Island to establish a solid foundation for the future, the Oversight Board also recognizes that given the complexity of the situation and lack of progress in implementation to date, pausing new measures for a year will provide time to focus all efforts on implementation of the changes that need to be effected. The Oversight Board urges the Government to re-commit to identifying and driving initiatives that will result in better processes, more efficient spending, and greater quality of service for the Island. The 2020 Fiscal Plan also introduces the concept of milestone budgeting, which provides incentives for achievement of longstanding key fiscal goals and efficiencies. For example, the Department of Corrections will receive additional budget allocations for FY2021 capital expenditures once it has provided an outline for its facility footprint and consolidation assessment study.

Fiscal measures

Agency Efficiencies (Chapter 13). A new model for government operations will "rightsize" the Government through agency consolidation and reduction and/or elimination of government services. It includes comprehensive reform initiatives in the Departments of Education, Health, Public Safety, Corrections, OCFO, and Economic Development, as well as consolidations and reductions within the long tail of other agencies. Agency efficiency measures must result in \$1,215 million in run-rate savings by FY2025.

Office of the CFO (Chapter 14). The Office of the CFO ("OCFO"), will be responsible for—and crucial to achieving—a variety of reforms to ensure the most efficient financial stewardship of the Island's resources.

Medicaid Investments and Reform (Chapter 15). Healthcare measures seek to reduce the rate of healthcare cost inflation through a comprehensive new healthcare model that prioritizes quality relative to cost and must result in \$318 million in run-rate savings by FY2025, projected to grow with healthcare inflation.

Tax Compliance and Fees Enhancement (Chapter 16). Tax compliance initiatives involve employing technology and other innovative practices, as well as implementing new taxes, to capture revenue from under-leveraged sources. These initiatives must increase runrate revenues by \$462 million by FY2025.

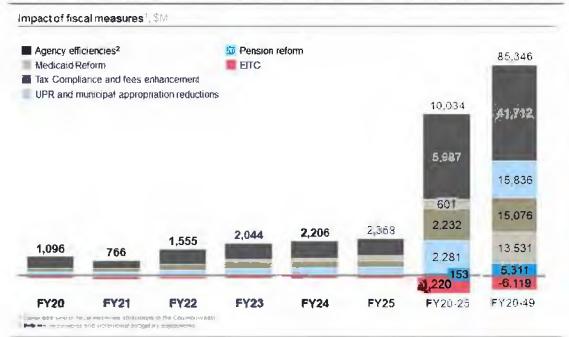
Reduction in Appropriations to UPR (Chapter 17). The central Government will decrease appropriations granted to UPR, which must result in \$282 million in run-rate savings by FY2025.

Municipal Services Reform (*Chapter 18*). The annual Commonwealth appropriation to municipalities will also be gradually phased-out in its entirety, which must result in \$220 million in run-rate savings by FY2025.

Pension Reform (Chapter 19). Improvements must be made to the current PayGo system and framework for Social Security and Defined Contribution Plan implementation in order to safeguard the financial stability of public employees' retirement funds. These pension reform measures must result in \$74 million of net run-rate savings by FY2025.¹⁹⁵

Together, these measures are crucial to the structural balance of the Commonwealth's budget, and are projected to have an impact of over \$10 billion during FY2020-2025 and over \$85 billion by FY2049 (*Exhibit 72*).

EXHIBIT 72: CUMULATIVE IMPACT OF FISCAL MEASURES SAVINGS AND REVENUES



¹⁹⁵ Excludes sayings attributable to the upfront payment to System 2000 participants.

Chapter 13. Agency efficiency reform

In accordance with Section 201(b)(1) of PROMESA, the Fiscal Plans for Puerto Rico "provide a method to achieve fiscal responsibility and access to the capital markets." When the Fiscal Plan process began in 2017, the Government had approximately ~116,500 employees across 114 Executive Branch government agencies, as well as agencies within the Legislative and Judicial branches (excluding large instrumentalities, e.g., PREPA, PRASA, HTA UPR, COSSEC, GDB). 196,197 These agencies were ineffective and inefficient in delivering the services needed by the people of Puerto Rico, while consuming resources that were outsized compared to the population served. Even now, compared with states serving similar populations, Puerto Rico remains an outlier in terms of sheer number of agencies. For example, as of 2018, Iowa only had 36 state agencies and Connecticut had 78. Staffing and managing an organization of this size is challenging even in a stable economic environment. With over 100 direct reports to the Governor, it has been a practically impossible management task. In addition, notwithstanding the amount of spending, there are countless examples of subpar service delivery across the Government. For instance, despite having six agencies primarily dedicated towards the financial stewardship of the Island, the Government has been unable to consistently issue consolidated audited financial statements on a timely basis. Further, Puerto Rico's education system has a record of consistently delivering unsatisfactory student outcomes, including below- US mainland average graduation rates and standardized test scores that are far below basic proficiency levels.

To assure the delivery of essential services while achieving financial sustainability, the Government must focus on operational efficiencies to enable better service delivery in a cost-effective way. A leaner, more efficient, and transformed future Government of Puerto Rico should wherever possible reflect mainland US benchmarks in terms of both number and size of agencies.

As part of the new Government model, the Government should consolidate the 125 agencies into no more than 44 agency groupings and independent agencies (see Section 0). In some cases, these consolidations should better focus the competing efforts of multiple agencies, such as the Economic Development grouping, which is consolidating ten agencies into one. In other cases, the consolidations should serve to move services closer to residents, such as the Healthcare grouping, which will consolidate access points to important services like Medicaid. Additionally, consolidations will enable agencies to streamline back-office processes, eliminate duplicative resources and benefit from procurement efficiencies.

In addition to agency consolidations, the Fiscal Plan outlines operational and process improvements that must be made to more efficiently use resources—including staff, equipment, services, and buildings—across agency groupings such as Education (PRDE), Corrections (DCR), Health (DOH), and Public Safety (DPS). The goal of such efficiency measures is to improve the quality of the underlying services for the population while also directing valuable resources toward priorities and achieving the cost savings needed to balance the Government budget.

These measures were developed through an iterative process with the Government and are designed to ensure compliance with necessary savings targets without compromising the quality of public service delivery on the Island—and actually improving it in many cases. These measures include various agency-specific efficiency (rightsizing) measures as well as certain government-wide savings measures:

¹⁹⁶ Excludes transitory employees

¹⁹⁷ Excludes agencies which currently have \$0 operating budget and no employees

- Agency-specific personnel measures: Personnel efficiencies specific to each agency
 (such as back office consolidation, process re-engineering to enable headcount rightsizing
 and align resources with mainland US state benchmarks) that will enable the reduction of
 payroll expenditure levels
- Agency-specific non-personnel measures: Operational efficiencies specific to each agency (such as procurement centralization and optimization of spend, consolidation of facilities) that will enable the reduction of non-payroll expenditure levels
- Government-wide compensation measures: Standardization of personnel policies throughout government (including institution of common healthcare benefits, a hiring freeze, and limited holiday pay, as well as elimination of the Christmas bonus and carryover of sick/vacation days beyond the statutory caps) to enable the reduction of payroll expenditures across agencies without reducing additional employees
- Government-wide non-personnel measures: Energy efficiency improvements and conscious usage of electricity and water (e.g. PREPA and PRASA), resulting in savings on utility expenses. Further, reductions to professional services to enable the professionalization of the civil service and reduce reliance on outside consultants. Finally, elimination of 'englobadas' or less transparent spending, which impacts fiscal controls and accountability.
- Investments and other funding: Agency-specific one-time or recurring funding provided by the Fiscal Plan to ensure Government agencies can meet federal requirements, provide quality front-line service delivery, respond to COVID-19, and focus on implementation of efficiency measures.

To date, the Government has unfortunately not demonstrated meaningful progress in implementing agency consolidations or otherwise improving operational efficiency, though they have generally met budget targets.

To achieve personnel savings, the Government has primarily utilized broad-based early or incentivized retirement programs (e.g., the Voluntary Transition Program and Voluntary Pre-Retirement Program (Law 211-2015, as amended)), instead of driving optimization of back-office roles (e.g., through reduction of duplicate administrative roles in DCR or centralizing back-office operations in OCFO) or initiatives to align front-office roles with benchmarks from mainland US states (e.g., State Elections Commission personnel). The Government's efforts through these untargeted retirement programs have led to large payouts with high retirement rates, major gaps in skills and capabilities, and a slower, less effective government, often encouraging needed personnel to retire early.

To achieve non-personnel savings, the Government has made little to no changes in the procurement processes or the organization of operations. While the Government has reported its intent to centralize procurement (within GSA), consolidate the number of contracts across agencies, and consolidate physical locations of operations, inefficient spending often continues longer than necessary (e.g., utility expenses at closed schools have largely continued even though the school is unused, and officers continue to be staffed to guard closed correctional facilities).

While this approach enabled the Government to meet budget targets in FY2019, it has prevented meaningful progress towards more effective or sustainable agency operating models. Without changing the way services are delivered and/or determining which non-priority government activities will be discontinued, simply reducing headcount risks exacerbating already outdated government operations. Going into the next fiscal year (FY2021), this approach to personnel reductions would lead to a need for agencies to take drastic actions (e.g., decreasing the accessibility or quality of services offered, or slowing or altogether halting important services) given no rethinking of delivery has accompanied the reduction in staffing. This was not the intent or the requirement of the Fiscal

Plan. Clearly, this creates a precarious risk for the population, especially given recent earthquakes and the COVID-19 crisis, which both mean that Puerto Rican residents are further reliant on the Government to effectively, efficiently, and promptly provide them the public services that enable life to recover and continue.

Thus, while the Oversight Board continues to believe that the fully outlined efficiencies are of the utmost importance for the Island to have a solid foundation for the future, the Oversight Board also is cognizant that, given the current circumstances, the Government will need to invest time and effort in achieving the measures previously required and not yet implemented, while supporting Puerto Rico residents. Therefore, the 2020 Fiscal Plan has paused incremental agency efficiency measures until FY2022. The expectation is that this one-year pause will enable the Government to redouble its focus on implementation of the efficiency measures not implemented to date.

The Oversight Board is also including implementation budget incentives in FY2021 to encourage accelerated implementation of reforms that would bring Puerto Rico a step closer to a sustainable government. There are six affected agencies: PRDE, DCR, DDEC, DOH, Hacienda, and AAFAF. In select priority areas in which agencies implement certain required actions — including but not limited to meeting higher data quality and transparency standards, conducting operating model/capacity analyses, or building up essential infrastructure to facilitate process improvements — incremental budgetary resources are available for the implementing agency. Detailed descriptions of these implementation budget incentives are included in the required implementation actions detailed for each agency later in this chapter.

13.1 Agency operational efficiencies and improvements

The Fiscal Plans outline a set of medium-term savings the Government is expected to achieve through both agency-specific and government-wide personnel and non-personnel measures

13.1.1 Agency-specific personnel and non-personnel efficiency measures

There are several actions that have been applied to each agency to achieve these targets:

- A series of agencies must be merged when benchmarking and best practices
 determine that activities across agencies could be better served through a single mission
 and management to eliminate redundancies, and/or where economies of scale make
 shared services more economical without reducing quality of service
- A small subset of agencies will be left independent but made more efficient through a series of streamlining efforts related to both personnel and operations, allowing the agency to provide improved services at a lower cost to taxpayers
- Some agencies will be closed completely or privatized if their function and programs are not required, or can be transferred to private ownership, resulting in a 100% personnel and non-personnel savings for all non-federal funded expenditures after a two to three-year wind-down period (a minimum of 50% savings must be achieved no later than year two). The Government proposed six agencies for closure: Model Forest; Culebra Conservation and Development Authority;¹98 Company for the Integral Development of Cantera's Peninsula;¹99 Economic Development Bank; Industrial, Tourist, Education,

¹⁹⁸ Agency will only be partially closed, so funding will be reduced by 32% overall starting in FY2020.

¹⁹⁹ To be closed on July 1, 2033 per current law.

Medical, and Environmental Control Facilities Financing Authority (AFICA); and National Guard Institutional Trust.²⁰⁰

 Additionally, the Oversight Board requires the transfer of ownership or change in legal status of the Public Broadcasting Corporation (WIPR) to a not-for-profit organization.

The Fiscal Plan lays out three major types of areas of operational efficiency across all agencies (whether consolidated or kept independent, but made more efficient):

- Back-office personnel savings: Achieve process efficiencies, centralization, or digitization of redundant tasks and eliminate role duplications in administrative positions. These levers have demonstrated savings of 15-20% in entities undergoing mergers
- Front-office personnel savings: Achieve personnel efficiencies by ensuring staffing levels are consistent with operational drivers with benchmarks from mainland US states
- Procurement/non-personnel savings: Achieve operational efficiencies through contract renegotiations, reduction of rent payments, reforms on bundling acquisition across agencies, and other initiatives. Similar reforms of this nature have been shown to save create savings of 10-15% for public and private sector entities

The Oversight Board and Government established a working group in 2018 to develop the roadmap for this rightsizing effort, which became the basis for the Fiscal Plans. For several of the larger agency groupings (i.e., PRDE, DOH, DPS, DCR, DDEC, and OCFO), the Fiscal Plan lays out specific reforms expected in each of these areas. For other agencies, the Fiscal Plan sets savings targets that agencies are expected to achieve through their own operational improvement plans. Finally, while the Government has indicated that some consolidation plans may change, the Government shall still be accountable for achieving the total annual savings projected in the 2020 Fiscal Plan.

13.1.2 Cross-cutting personnel measures

In addition to driving operational improvements specific to service delivery, the Government is expected to achieve cross-cutting personnel expenditure reductions through several initiatives which would reduce the requirement to reduce personnel:

Maintaining a payroll freeze: The March 2017 Fiscal Plan included a measure to freeze all payroll expenditures which became law in FY2018. To extend the savings from freezing payroll increases and avoid dramatic further rightsizing of staff, the freeze must be continued through the end of FY2023.

Standardizing healthcare provided to government employees: Medical insurance is a core benefit provided to all government employees. However, the degree of coverage varies widely across government agencies, with some employees receiving superior coverage compared to their peers. For instance, PRDE employees receive an average of \$120 per month in medical benefits, whereas employees of the Housing Finance Authority receive more than \$1,000 per month.²⁰¹ To ensure fairness and reduce expenditures, the Government must implement its proposal to standardize employer health insurance contributions so that all Commonwealth agencies contribute \$125 per employee per month, or \$1,500 per year, with the exception of public corporations, which should maintain current employer contribution levels for those employees with pre-existing conditions. This initiative should have been fully implemented by the start of FY2019, but it has not been to date.

²⁰⁰ The National Guard Institutional Trust and Economic Development Bank will close but not achieve any savings.

²⁰¹ Analysis of active, non-transitory government employees not supported by Federal Funds; data provided within January 2018 Government attrition model

Reducing additional outsized non-salary compensation paid to employees: There are several policies that the Government must continue to enforce through the duration of the 2020 Fiscal Plan that will impact personnel spend. These include:

- Asserting a hiring freeze with stringent requirements for backfilling positions left open by attrition or workforce reduction
- Limiting paid holidays to 15 days annually across all public employees
- Prohibiting carryover of sick and vacation days between fiscal years over the statutory caps (60 days for vacation and 90 days for sick leave, aligned with Act 26-2017)
- Prohibiting any future liquidation of sick and vacation days in excess of the amount of days permitted by law
- Eliminating funding for the Christmas bonus

The hiring freeze policy has been included since the March 2017 Fiscal Plan, and the 2020 Fiscal Plan continues to enforce that policy while requiring the Government to propose stringent requirements for the backfilling of any opened positions and gain budgetary approval by the Oversight Board before doing so.

The other policy measures outlined above were enacted in Act 26-2017, except for the elimination of the Christmas bonus. The elimination of the Christmas bonus was to be implemented starting in FY2019, but unfortunately the Government paid the bonus without approval from the Oversight Board. Meanwhile, in FY2020, the Oversight Board reached an agreement with the Government to pay employees the Christmas bonus as feasible within the existing Commonwealth FY2020 Certified Budget. Moving forward, Certified Budgets will not include funding for the Christmas bonus.

13.1.3 Cross-cutting non-personnel measures

In addition to driving operational improvements specific to service delivery, agencies should reduce spend on utilities as well as on other areas of the budget which have been historically "opaque" in terms of where funds are flowing:

Reducing utility spend over time: The Government should implement energy efficiency initiatives that reduce utility payments in line with mainland energy efficiency efforts such as the US Federal Energy Management Program (FEMP). Energy efficiency initiatives would include facility & fleet optimization (e.g., recycling), improved procurement agreements, and strategic investments, potentially through utility capital expenditure. By FY2023, the Government must achieve savings of 15% on its FY2018 utilities expenses, considering the rate increases projected by PREPA and PRASA. As with agency-specific rightsizing measures, additional increases in savings to be achieved will be delayed until FY2022.

Reducing spend on historically low visibility areas: The Government should continuously monitor and reduce expenses in historically low-visibility areas (e.g., "unclassified professional services" and "englobadas"). In the 2019 Fiscal Plan, a one-time and government-wide 10% incremental cut on professional services spend and 10% limit to unclassified professional services was required. While no incremental cut is explicitly required in FY2021, the Oversight Board continues to expect more rigorous documentation and justification for such spending before approving their inclusion in future agency budgets and will maintain the 10% limit on unclassified professional services.

As with prior Fiscal Plans, this 2020 Fiscal Plan includes implementation exhibits that date back to Fiscal Plans certified in 2018 (see *Section 25.3*). These exhibits continue to show implementation dates that have passed without Government completion of the action. The Government must act to address these missed milestones and to accelerate the pace of change.

This Fiscal Plan therefore also lays out future dates for these milestones, for which the Government is accountable.

13.2 Investing to support agency efficiency and recovery

The 2020 Fiscal Plan includes new incremental funding to support the Government in its efforts to operate effectively and sustainably. These include:

- Immediate funds for COVID-19 response: In addition to pausing new measures for FY2021, the Fiscal Plan includes \$787 million certified as part of the Emergency Measures Support Package, solely focused on mitigating the effect of the COVID-19 pandemic on front line healthcare and public servants, as well as self-employed and small businesses. The package is comprised of \$500 million in additional FY2020 expenditures, a \$157 million reapportionment from the FY2020 General Fund budget, and \$131 million in Restart funds. These funds are intended to provide \$212 million for "hazard pay" for frontline workers (including public and private nurses and technicians, police, certain correctional staff, and professionals managing taxes and financial operations), \$50 million for medical and public safety supplies and capital expenditures, and \$255 million for enabling distance learning in the public education system, \$101 million for municipalities, and \$160 million in one-time direct payments to individuals and small businesses.
- Investments in frontline service delivery: The 2020 Fiscal Plan includes several incremental investments in frontline service delivery, including compensation and benefit raises for police officers (including backpay for those who are owed overtime payments from past service); support for Special Education therapy, and overdue teacher compensation; funds to attract additional recruits to the Emergency Medical Services Corps and Institute of Forensic Sciences; and investments in healthcare (including funds for opioid treatment, telehealth, electronic health records, hospital capital expenditures, scholarships for medical students who commit to practice outside of major metro areas, and additional school nurses).
- Support for accelerating operational improvements: The Government lack of progress on operational changes to date has created a risk to government services delivery, especially given the effects of the recent earthquakes and COVID-19. Given the complexities of the situation, the Fiscal Plan includes a one-year pause in new rightsizing measures, which is intended to enable agencies to focus all efforts on implementing the necessary operational reforms needed to improve services long-term. Further, the Fiscal Plan includes implementation budget incentives that would become available when certain milestones are accomplished (e.g., consolidation of back office functions).
- Funding to enable consent decree compliance: Several Puerto Rico Government agencies are subject to federal consent decrees that require them to adhere to certain regulations. With these consent decrees often come funding requirements (such as, certain funding levels to Special Education students). The 2020 Fiscal Plan includes funding for the consent decree requirements that the Oversight Board is aware of currently.

Specific investments are detailed by agency in the following sections.

13.3 Department of Education (PRDE)

The Puerto Rico Department of Education (PRDE) is the largest government agency within the Commonwealth, charged with providing high quality education for approximately 289 thousand K-12 students across the Island at 856 schools. Meanwhile, as *Chapter 9* indicates, for several years PRDE has struggled to improve educational outcomes for its students and to operate at a size commensurate to its student enrollment.

First, student outcomes and proficiency rates have declined for all core subjects in the past years, as measured by META-PR test results. Since the META-PR test was implemented in FY2016, proficiency rates have fallen, compared to FY2019, as follows: Spanish by 6% (from 51% to 45%), Math by 3% (from 33% to 30%), English by 6% (from 45% to 39%) and Science by 6% (from 53% to 47%). Further, as the largest agency in the central Government by budget, PRDE is outsized relative to its results and needs. While student enrollment has declined considerably over the past few decades (over 50% decline since its peak in 1980 and approximately 33% in the preceding decade) in line with a declining population, prior to the first Fiscal Plan, the number of schools and teachers had not decreased proportionally.^{202,203}

A significant factor driving PRDE's subpar outcomes is a set of underlying bureaucratic systems and structures that are ineffective and inefficient. Simply stated, PRDE has not developed the internal capacity, or led with commitment to a clear plan to manage the complex educational dynamics in Puerto Rico. PRDE has not fully mobilized the organization to execute on a clear strategy to accelerate progress in schools—namely, the creation of seven regional offices that were launched on the premise of providing more direct support to schools through a decentralized model that is more responsive to the specific needs and context of each school. While the regional offices are up, running and staffed, they currently function more as an additional layer of bureaucracy, rather than as mechanisms to drive change and shared learning closer to the student and parent populations in schools.

The Oversight Board has made a number of suggestions to help PRDE operate in more strategic ways while aiming to fulfill its core function of driving a more efficient and cost-effective educational delivery model within PRDE. Rather than implement these efficiencies, PRDE has relied on actions that enable near-term savings but hurt its ability to provide optimal services in a sustainable way in the long term. For example, in order to achieve payroll savings, PRDE implemented a broad-based Voluntary Transition Program (VTP) in FY2019, instead of enforcing its existing classroom staffing policies, revamping back-office processes, and executing planned active workforce reductions. As a result, by its own reasonable staffing guidelines, referred to as *Organización Escolar*, PRDE has more teachers in aggregate than it needs, and—even after closing 255 schools—PRDE still operates a system that has significantly more capacity than it has students. At the same time, PRDE does not have teachers in all the places it needs; it has a clear deficit in the number of English language teachers to support students across the Island. All of these issues result in schools that are sub-scale and require more resources, on a per student basis, to operate.

The Oversight Board recognizes that PRDE has been operating in a complex environment in the wake of Hurricanes Maria and Irma, recent earthquakes, and the spread of COVID-19. Indeed, the challenges that the Department faces even to re-open schools in the fall are formidable. However, beyond these crises, PRDE has further created challenges for the school system. Investments approved for FY2019-2020 by the Oversight Board for teacher and director salary raises and student textbook purchases, all meant to improve the quality of education, have either been stalled or implemented incorrectly (though the funds provided have been spent, at least in part). When the Fiscal Plan provided salary raises to teachers, the Department incorrectly implemented the investment (as it did not provide raises to transitory teachers), thus incurring an estimated \$23 million of retrospective pay, which resulted in lawsuits against PRDE by the Teachers Union. Additionally, due to PRDE's poor management of federal funds, the US Department of Education is requiring the agency to contract a third party for spending oversight. Finally, PRDE has been unprepared and thus unable to provide

²⁰² Helen F. Ladd and Francisco L. Rivera-Batiz, "Education and Economic Development in Puerto Rica" The Puerto Rican Economy: Restoring Growth, Brookings Institution Press, Washington, D.C., 2006, 189-238

²⁰³ There were 1,619 public schools in 1990 and 1,131 at the time of reporting. Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation," November 30, 2017

distance learning and other important services in the wake of the earthquakes and the global COVID-19 pandemic.²⁰⁴

Given the federal and local response to COVID-19, PRDE will have access to significant federal funding to help address high priority needs associated with planning for a safe return to school in the fall and offering robust remote learning opportunities in the case of ongoing physical school closures to prevent further learning loss. Incremental funds available to PRDE include:

- Federal funding of ~\$349 million for K-12 education made available through the Elementary and Secondary School Emergency Relief Fund of the CARES Act
- A portion of the ~\$48 million allocated to the Governor's Emergency Education Relief Fund, authorized by the CARES Act
- Federal funding carryover from FY2020 of \$680 million that has been frozen while the Department contracts with a fiduciary agent
- Additional Commonwealth appropriations of \$124 million as part of the FY2020 Emergency Measures Support Package to enable implementation of remote learning (part of total investment in devices of \$255 million, partly funded through RESTART funds)

The above funding—which will require a clear plan and rigorous controls to provide for the basic needs of students and families—are not meant to reduce the expectation that the Department accelerate a major transformation of its operations and basic management improvements to better provide services and maintain fiscal balance. Without active management and operational improvements, PRDE will likely continue to see student outcomes stall.

To improve the capabilities and capacity of the Puerto Rican population, the Government will need to set high aspirations and redouble efforts. This involves both immediate actions to enable learning to continue in the context of COVID-19, while also driving the operational and management improvements to provide better services for the children of Puerto Rico. To support these efforts, the Oversight Board is providing funding, which will go to support fulfillment of federal consent decrees, hiring of additional school nurses, textbook procurement, transportation, and increased teacher compensation.

²⁰⁴ PRDE finally opened cafeterias on April 29, 2020 after the Oversight Board sent a letter to the Governor on April 24, 2020 with a list of short, medium and long-term solutions for PRDE's consideration to ensure proper nutrition and made available to students. However, as of latest information available to the Oversight Board, only ~10% of school cafeterias are currently open and PRDE is distribution only lunch meals (not breakfast) to ~14% of students, and majority of food distribution efforts to students is being led by municipalities.

Investments to drive operational improvements

In addition to the investments outlined in *Chapter 9*, the 2020 Fiscal Plan will provide funding to ensure PRDE has what it needs to fulfill federal requirements and to enable better service delivery:

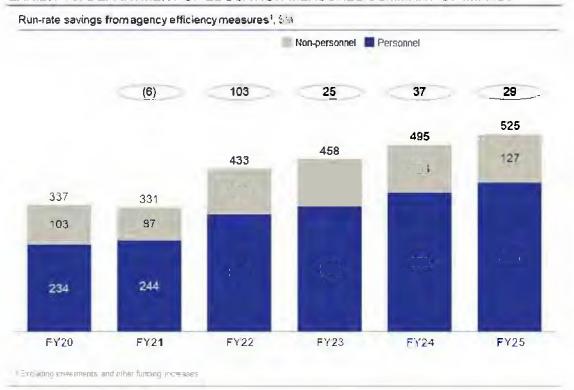
- Teacher and school director compensation (~\$285 million over five years): The 2018 and 2019 Fiscal Plans provided salary raises for teachers and directors in FY2019 and FY2020. Unfortunately, however, PRDE mistakenly excluded transitory teachers and directors from these raises, which has generated a lawsuit against the agency. As such, the 2020 Fiscal Plan provides raises for these groups.
- Textbooks, transportation, and other student services (~\$65 million): The Fiscal Plan includes \$25 million across FY2020-2021 for textbooks and \$40 million in FY2021 to cover transportation costs (largely to support Special Education students), student food expenses, and other materials.
- Additional school nurses in all schools (~\$15 million per year): The Fiscal Plan provides \$15 million per year to hire needed school nurses, instead of contracting these services.
- Student and teacher time and attendance reporting (~\$6 million): A major gap for the Department is it is not able to accurately report headcount or student enrollment. This is due in part to an over-reliance on manual processes, as well as poor management. The Fiscal Plan therefore provides funds to support the implementation of Kronos, a time and attendance system, and to provide incentives to directors and schools that demonstrate consistent and reliable reporting on student and teacher attendance.

Special Education Remedio Provisional program-specific FY2021 budget accounting: In addition to the funding above, the Fiscal Plan ensures that PRDE is compliant with legal requirements for the Special Education program. In order to ensure proper resources are allocated to all Special Education students, the FY2021 Budget for the Special Education Program and the Remedio Provisional Program will be separately presented from PRDE's overall budget. By doing so, the Oversight Board can ensure resources are properly allocated based on special education student enrollment and needs, while also ensuring greater transparency in program spending.

13.3.1 Overview of efficiency measures

PRDE will not be required to achieve additional savings in FY2021 over that required in FY2020 – this delay must be used to manage through the current pandemic and progress with implementation efforts across key reforms. However, in FY2022 to FY2025, PRDE must achieve the personnel and non-personnel savings outlined in *Exhibit 73*.

EXHIBIT 73: DEPARTMENT OF EDUCATION MEASURES SUMMARY OF IMPACT



Improving student-teacher ratio

One key indicator of school efficiency is the student-to-teacher ratio (ST ratio) used across the school system. Given the need for PRDE to rightsize its resources in alignment with a steadily declining students enrollment, it should aim to manage to its ST ratio to ensure improvements in efficiency.

The 2020 Fiscal Plan reflects an updated calculation for the ST ratio, based on data from the Department, to include both general education students as well as Special Education students who spend most of the school day in inclusive classrooms with their general education peers (known as "salon recurso"). As in prior Fiscal Plans since April 2018, the teachers counted in the ST ratio are those that teach core subjects and/or homeroom classrooms (previously referred to as 'academic' teachers). ²⁰⁵ Also, in prior Fiscal Plans, staffing of all other teachers (previously referred to as 'non-academic' teachers) are expected to be rightsized through attrition. ²⁰⁶

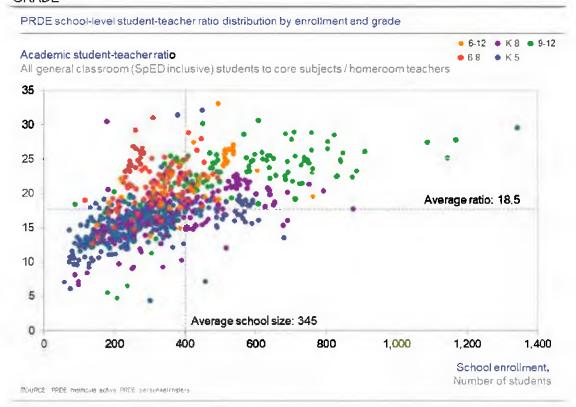
While the FY2018 baseline system-wide ST ratio was 18.9 (332,251 students to 17,607 teachers), data provided in December 2019 indicates that the ST ratio has worsened to 18.5 (~276,000 students to ~15,000 teachers). Moreover, given the range of school sizes across the Island, many schools have a staffing ratio that is much lower than 18.5. Exhibit 74 below shows that ~500 schools have a ratio below 18.5, and 75% of those schools have enrollments below 345 students. As a result, by the Department's own guidelines, referred to as Organización Escolar, it has "overstaffed" schools by ~800 teachers in FY2020, and without further action, the ST ratio would decline to 15.3 by FY2025.²⁰⁷

²⁰⁵ Core subjects / homeroom teachers include those that teach General Education, English, Math, Science, Spanish, History, and homeroom.

²⁰⁶ All other teachers include, for example, Career and Technology, PE, Arts, and Special Education teachers.

²⁰⁷ PRDE student-teacher ratio analysis.

EXHIBIT 74: ACADEMIC STUDENT-TEACHER RATIO BY SCHOOL ENROLLMENT AND GRADE



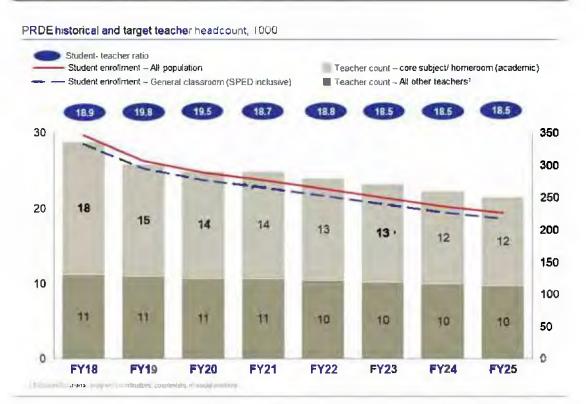
Part of this problem can be resolved through a more formalized implementation of PRDE's own staffing policies (i.e., *Organización Escolar*) and are summarized in *Exhibit 75*.²⁰⁸

 $^{208 \ \}mbox{Based}$ on policy documents from and discussions with PRDE.

	Formal policy	Implied guidelines	No implied guidelines
General Education	Class size maximums (PK: 16, K-3: 25, 4-12: 30)	Grades 6 12: 5 classrooms per pod of 5 teachers – consisting of math, science, history, Spanish, and English teachers	 General Education assistants (n=~80)
Specialty		 English (K-5): 5 classes taught per day PE. 1 every 250 students Arts Health, Career & Technology 1 per subject per 6-8 and 9-12 grade 	
Special Education	Class size maximums Regular, reduced enrollment: 16 Full-time classroom (promotion): 12; Full-time classroom (modified): 10 Resource teachers 25 pull-outs per day Therapists: based on individual IEP	Note: Special Education class size maximums in practice are lower than stated formal policy	 Special Education assistants (n=5.8k) Note: Driven in large part by IEPs, but exceptions are made based on need with no firm ratios
Source / Policy	Organización Escolar (General Education + Special Education) Convenio Colectivo	Escuela Basica HR Director guidance	Decisions are made flexibly

Given that Fiscal Plan savings targets are being deferred by one year, we anticipate that the Department's student-teacher ratio will fall from 18.5 in FY2020 to 17.7 in FY2021 given the forecasted enrollment decline. However, in subsequent years, the expectation will once again be that PRDE is more efficiently managing its student-teacher ratio by faithfully observing its own staffing policies (i.e., *Organización Escolar*).

EXHIBIT 76: TEACHER-RELATED PAYROLL SAVINGS



While by following its own guidelines, PRDE would be pursuing a more efficient staffing structure than its current state, it will still ultimately fall short of Fiscal Plan targets over time given that many schools operate at inefficient enrollment levels and thus incur significant "breakage" (i.e., underutilized teachers). For example, if a school has 36 students in 3rd grade, that school will need two 3rd grade teachers with classrooms of 18 students each, even though those teachers could theoretically teach an additional 7 students each, per the Organización Escolar guidelines. This situation exists across the Island: only 40% of PRDE's total 856 schools operate at an efficient school size (see Exhibit 77). These schools are geographically dispersed across the Island, with inefficiencies existing in all regions and urban/suburban/rural.

EXHIBIT 77: MAP OF PRDE SCHOOLS BY ABILITY TO ACHIEVE EFFICIENT STAFFING

PRDE schools by location and efficiency



Inefficient school: based on current enrollment structure or size. applying organización escolar results in a teacher need that equates to a below average ratio

485 schools

Efficient school: based on current enrollment structure or size, applying 353 schools organización escolar results in a teacher need that equates to an above average ratio

As enrollment is projected to decline by 4-5% each year through FY2026 (due to overall Island population decline), this issue of breakage will worsen, with schools increasingly less able to maintain efficient staffing levels. While the Fiscal Plan does not require additional school closures (which would reduce breakage in the system), it is nonetheless important to acknowledge the personnel (and operating) costs of managing a school system where capacity exceeds enrollment. This issue can be best addressed with active footprint management, taking into consideration geographic and student demographic constraints. While the Fiscal Plan does not require footprint redesign, it acknowledges that such reform will be important for the Department to pursue in the long-term in the face of continuing decline in enrollment.

EXHIBIT 78: REQUIRED IMPLEMENTATION ACTION ITEMS FOR IMPROVING STUDENT-TEACHER RATIO

Pequired implementation action Delineate roles and responsibilities for each function of the Central vs. Regional offices in a manner that allows. PRDE to identify duplicative responsibilities and re-prioritize school support in the regions.	
Define an implementation plan to invest in Region's school support function by re-allocating staff to increase academic facilitator positions in the regions and reduce administrative headcount in the central and regional administrative offices, aligned to Fiscal Plan targets for FY2022 to FY2025	December 2020
Define an implementation plan to align teacher count to current organización escolar guidetines for identified schools – this change would allow PRDE to meet the Fiscal Plan savings targets for FY2022 to FY2025, as described in Exhibit 5 above	May 2021
Outline a plan to streamline the process for school staffing in a transparent data-based manner that will allow PRDE to continue to manage the student-teacher ratio in a systematic way	May 2021

Optimizing personnel with school consolidations

To date, school consolidations have not led to proportional cost savings because they have not been accompanied with concurrent reductions in administrative staff. From FY2022 forward, the 2020 Fiscal Plan requires the number of school administrators (principals, office staff, etc.), food service staff, facility maintenance staff, and other school-specific staff to be scaled down to account for a smaller number of schools (than achieved with to-date consolidations). To do this, the Department should endeavor to maintain its 2018 average of 2.24 administrative FTEs per school, 3.39 food services FTEs per school, and 2.27 maintenance FTEs per school.

In FY2020, the Government informed the Oversight Board that PRDE's staffing levels for food services and maintenance staff²⁰⁹ are driven by minimum staffing requirements established through Collective Bargaining Agreements with the worker's union and inhibit the agency's ability to reduce headcount further (in line with school consolidations). When asked to provide further support for this assertion, no further information was made available.

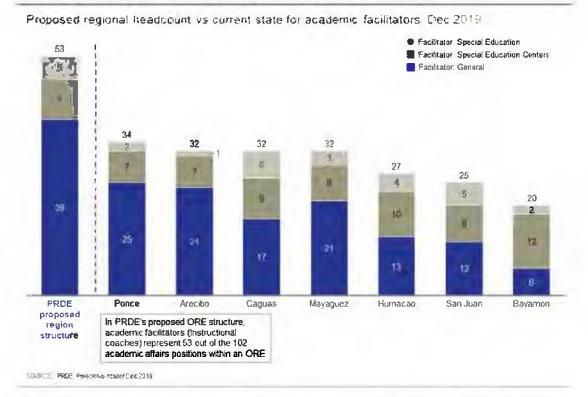
Rightsizing regional and central offices

The 2020 Fiscal Plan supports PRDE's own proposed shift from a single central administrative office model to a central/regional administration model. By pursuing a regional model, PRDE had aimed to enable faster, more locally relevant services; drive system-wide initiatives and shared services from a central office; and reduce administrative headcount. In this new central/regional model, administration of individual schools would be decentralized and made leaner while also putting decision-making closer to students and families. Developing and relying on regional leadership would also allow PRDE's central administrative structure to right-size to staffing levels comparable to state educational agencies on the mainland. In keeping with the push toward a central/regional model, the 2019 Fiscal Plan required that by FY2020, PRDE achieve approximately a 25% reduction in administrative headcount between regional and central office roles — this target is maintained in the 2020 Fiscal Plan, though the distribution of staff amongst roles appears to now be different per the latest data analyzed from PRDE.

As of December 2019, PRDE had ~3,500 staff that held central/regional office roles: ~800 in the central office, ~900 in the seven regional offices, and the largest portion, ~1,800, in field-based roles that are directly serving schools or groups of schools but tagged to regions.

Separate from the staff headcount, the current staff composition for the regional offices is heavily concentrated in administrative roles, instead of educational support roles, which were the original primary purpose for creating regional offices. In fact, across all seven regions, PRDE's count for academic facilitators falls short of what its own design of the regional structure would require (*Exhibit 79*). PRDE must realign its resources to address this gap by appropriately downsizing administrative functions in the regions.

EXHIBIT 79: ACADEMIC FACILITATOR COUNT VERSUS TARGET



Further, there remains opportunity to right-size the central office as an FY2019 analysis conducted by PRDE concluded that the central office could operate efficiently with ~600 staff if allocated appropriately across functional areas.²¹⁰

Moving forward, PRDE should pursue its vision for a more well-defined central/regional model by eliminating duplicative responsibilities between the central and regional offices and prioritizing school support in the regions. Further, PRDE should rebalance staff to increase academic facilitator positions in the regions and to right-size administrative headcount in the central and regional offices to ensure resources are more adequately focused on driving student achievement in schools.

Consolidating the K-12 school footprint

After an analysis of several factors including capacity, geographic and cultural characteristics, distance to neighboring schools, transportation costs, and facility quality, among others, the October 2018 Fiscal Plan determined that PRDE should close 307 schools by FY2020. Consolidation of schools would enable systems to invest in a smaller number of higher-performing schools. Each school closure was estimated to save \$47,000 annually by reduction of facility costs.²¹¹ By FY2020, PRDE consolidated 255 schools, and the Oversight Board had determined that no further closures were required. However, the Fiscal Plan still expects these savings (representing ~\$15-20 million per year) to be captured elsewhere.

Meanwhile, to date, consolidation of the 255 schools has resulted in lower utilities and other operating costs, but many of these buildings have been left empty or repurposed for administrative uses, which has inhibited PRDE's ability to capture full savings from each of the school closures. Further, notwithstanding that PRDE is often not the owner of the schools,

²¹⁰ PRDE analysis of Administrative headcount need for central office in FY2019

^{211 ~\$47,000} is a result of analyzing Government-provided school closure data from previous years and represents the average non-personnel savings across a group of 151 closed schools.

the Government must make every effort to finalize a plan for sale, lease or other to ensure the unused buildings are most efficiently utilized in the communities and do not create new community challenges due to their abandonment. Starting in FY2022, PRDE is expected to capture all of these savings.

Reducing procurement spend

PRDE procurement spend should be reduced by ~10-15% by FY2023 through centralized procurement policies, including strategic purchasing, and demand controls. To date, PRDE has not made notable progress in realizing procurement savings, and instead has depended on the centralized GSA to provide them with the savings. GSA has not taken on a meaningful role in procurement on behalf of PRDE to date, and PRDE is responsible for achieving these procurement savings in the interim.

PRDE's ability to make informed strategic management decisions on how to effectively allocate resources to procurement expenses is constrained by a lack of transparency in spending. For example, the Oversight Board's analysis of FY2019 spending revealed that ~40-50% of non-personnel expenses are tagged to categories that have unclear descriptions, serve as miscellaneous categories, or simply are listed as "unclassified" (Exhibit 80). A significant percentage of both professional services and purchased services are not classified, meaning they are missing basic descriptive information to categorize spend without referencing back to the original contract documents. PRDE needs to improve accounting and expense categorization data not only to be able to manage costs, but also to leverage dollars more effectively for students.

EXHIBIT 80: FY2019 PROCUREMENT SPEND BREAKDOWN

In FY2019, PRDE had over 3,000 contracts driving \$851 million in procurement spending across all funding sources (General Funds and Federal Funds).²¹² There are four cost concepts that account for over 60% of that spending:

²¹² FY2019 PRDE Single Audit File.

- Facilities as a cost concept only represents ~4% (\$38 million) of procurement spend, but accounting for facilities-related vendors and programs (e.g., Oficina Mejoras Escuelas Publicas OMEP) from other concept codes, true spend on facilities is closer to ~22% (\$184 million) of spend. In fact, while purchased Services represents ~14% (\$116 million) of spend, upon further analysis, it appears that ~\$79 million of this spend tied to purchased services is spent on facilities-related vendors
- Transportation represents ~11% (\$94 million) of spend and covers ~18,000 general education students and ~12,000 Special Education students. However as of March 2020, ~9,800 Special Education students still did not have access to transportation services²¹³
- Professional Services represents ~30% (\$273 million) of spend, with Special Education professional services such as evaluation and therapy services accounting for ~40% (\$101 million). We further analyze Special Education services below.

Many of the contracts across these categories are very small and difficult to analyze due to limited data available about them. PRDE should identify more efficient ways to procure services to address its needs through procurement savings levers such as contract renegotiations, bulk purchasing, etc. Furthermore, PRDE should implement greater data and accountability standards for its contracts so that the value of these contracts can be assessed in the future. For example, it is difficult to ascertain how many and which schools and/or students benefit from each of these contracted services, whether these services have been fully delivered, and what their overall impact is.

Facilities costs

Currently, there is very little transparency into what PRDE spends on facilities. While FY2019 PRDE financial files indicated ~\$38 million of spending on facilities (in the "facilities" cost concept), deeper analysis suggests that facilities-related spend is also recorded in several other cost concepts, resulting in total facilities-related costs of closer to ~\$184 million (Exhibit 81). This current classification makes it difficult to disaggregate facilities spending into custodial, maintenance, utilities, rents/leases, and capital expenditures—a prerequisite to effective decision-making on facilities spending.

²¹³ PRDE-provided transportation data.

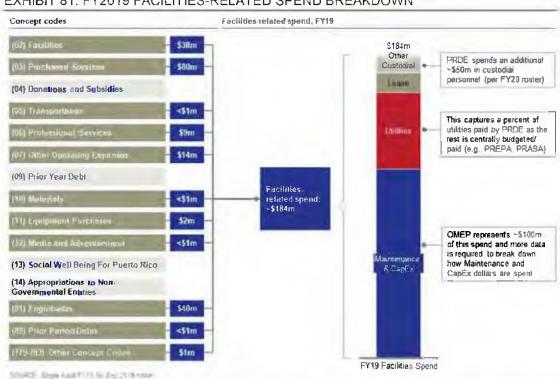


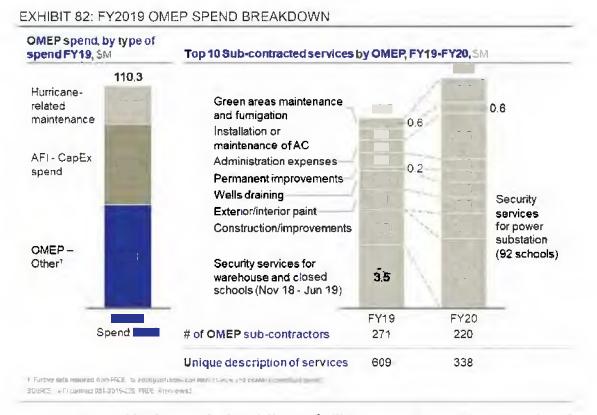
EXHIBIT 81: FY2019 FACILITIES-RELATED SPEND BREAKDOWN

Oficina para el Mejoramiento Escuela Publica (OMEP) represents ~60% (\$110 million) of facilities spending. OMEP operates as a program within PRDE²¹⁴ providing maintenance for over 50% (514) of PRDE schools and coordinating system-wide capital expenditures. Among its responsibilities, OMEP oversees the upkeep of green areas, plumbing, electricity, and basic construction work. OMEP outsources maintenance and capital investment for its 514 schools to a municipal contractor for 88% of schools (450 schools) and over 200 private contractors for 12% of schools (64 schools).²¹⁵

A preliminary analysis of OMEP's spending is provided in *Exhibit 82*, however current spend classification does not provide the sufficient visibility to assess the resource allocation between types of spend (e.g., routine maintenance vs. capital expenditures projects). Driving to a greater level of transparency in how OMEP spends its budget across the various facilities cost concepts will help PRDE make sure dollars are being allocated with the appropriate level of prioritization.

²¹⁴ OMEP costs are captured in an arrange of concept codes (e.g., Purchased Services, Materials, Professional Services, Facilities, Equipment Purchases, Other OpEx).

^{215 88% (450)} of the schools are served by a municipality contract.



PRDE must consider how to further delineate facilities costs across major categories of spending including custodial, maintenance, capital expenditures, utilities, rent/lease payments, etc., to allow for greater transparency into all facilities-related spend for the different programs at PRDE that offer these services.²¹⁶

More broadly, PRDE must commission the development of a Facilities Master Plan to assess its portfolio of buildings alongside their purpose and plan for the future. Facilities Master Plans are common across school systems, and consider the current use of each building, its condition, and its intended use going forward. Given that PRDE continues to have more seat capacity than students (a situation that will only become magnified given projected enrollment trends), it is critical for PRDE to prioritize investments in school buildings that have a long-term place in the school footprint. Such a plan would also allow PRDE to understand potential alternative uses of its facilities to accommodate difficult situations like the COVID-19 pandemic.

Transportation costs

In FY2019, PRDE provided transportation to ~18,000 general education students (~84% of those eligible under the minimum income and distance from school eligibility rule) and ~12,000 Special Education students (~55% of students that require transportation per their IEP as of March 2020).²¹⁷ PRDE spent roughly ~\$94 million on these student transportation services, almost all funded through General Funds. These services are procured in a highly fragmented way, with over 250 vendors and 35 municipalities providing services.

Of this total spend, ~60% (\$56 million) supports transportation for Special Education students. Using transportation data provided by PRDE, the average cost to provide

²¹⁶ Includes OMEP and Auxiliary Services programs.

transportation to a Special Education student is ~\$4,600, more than double the cost to transport a General Education student.

Federal IDEA dollars are often used to fund transportation for Special Education students; however, USDE-imposed restrictions on PRDE prohibit the use of federal funds for transportation. This is due to the fact that SAEE has had a series of reports on non-compliance with the provisions of the Code of Federal Regulations and the IDEA Law related to improper payments, lack of internal controls, non-compliance with the policies of the Agency, and lack of adequate monitoring in relation to the issuance of payments for transportation services to students of the Special Education Program. Thus, PRDE will have to continue to fund Special Education transportation through the General Fund, until compliance with USDE-imposed special conditions are met. Ultimately, this puts increased pressure on General Fund dollars for Special Education instead of being able to leverage Federal dollars. PRDE should evaluate its current spending on transportation services to ensure all eligible students are receiving transportation services if needed.

Across all procurement categories, PRDE must create greater spending transparency, focus on consolidating vendor contracts, and look to prioritize potential savings in areas that represent variable costs (which generally decline as enrollment does) and those that have less impact on students and schools.

EXHIBIT 83; REQUIRED IMPLEMENTATION ACTION ITEMS FOR REDUCING PROCUREMENT SPEND

Required implementation action	Deadlin6
 Define a plan to increase expense categorization and reporting transparency which could include adding descriptors in PRDE's internal financial systems (e.g., SIFDE) 	December 2020
 Evaluate current transportation spend and services in order to ensure that all students that are eligible (per IEP or regular eligibility guidelines) receive transportation services 	December 2020
 Evaluate facilities spend and create an implementation plan to capture all facilities spend at PRDE (e.g., spend from OMEP) in a more streamlined manner and to be able to differentiate spend between maintenance, capital expenditures and custodians 	December 2020
 Create a facilities master plan that assesses and the need of PRDE facilities portfolio in order to ensure that spend is prioritized according to need and PRDE's long-term facilities strategy 	May 2021

Special Education Program professional services costs

Overall, it is difficult to draw a conclusion as to whether Special Education spending is sufficient or not; while anecdotally PRDE is believed to be under-spending, it is difficult to assess definitively without better data on student need, which is articulated in Individualized Education Plans (IEP). It is imperative that PRDE digitize all IEP data in a manner that allows PRDE to monitor progress, ensure IEP compliance, and provide adequate resources for Special Education students.

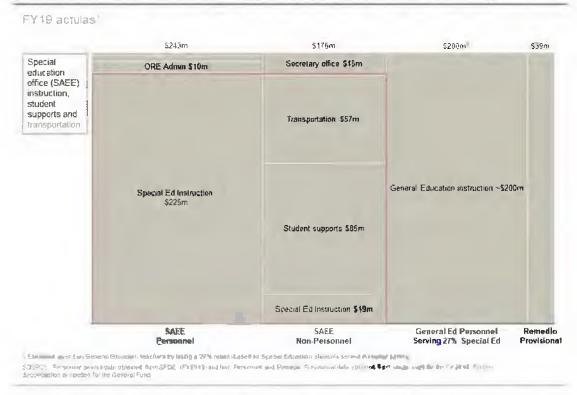
It is important to note that PRDE serves Special Education students through two programs. The primary program is the Special Education Program, known as Secretaria Asociada de Educación Especial (SAEE), which provides educational and therapeutic services to students, with the second program being *Remedio Provisional*, which only provides non-education support services to students. *Remedio Provisional* was created as a result of the Rosa Lydia Vélez Case to offer therapeutic services to Special Education students whose only impediment to receiving services is that the Department of Education does not have the resources to offer them. Typically, if PRDE does not provide necessary services within 30 days from the request of services from SAEE and drafting of the IEP, the family of the special education student has the ability to receive services through this alternate channel. While it is good practice for districts to have a formal mechanism for complaints and ensuring students receive adequate services, PRDE's way of addressing this situation is not typical. PRDE uses *Remedio*

Provisional as a more permanent solution for students to receive services when they are not budgeted for appropriately at the beginning of the year within SAEE, with difficulty to then transfer students over to receive services via SAEE the following year. Given this structure, PRDE ends up spending much more on student support costs than is necessary to deliver the same quality of service.

In FY2020, Special Education spending across all funding sources was as follows:

- Personnel: ~\$243 million spent on ~11,600 staff, with 95% dedicated to instruction
- Non-Personnel: ~\$176 million spent, with ~95% spent on student supports and instruction
- Remedio Provisional: \$39 million

EXHIBIT 84: TOTAL SPECIAL EDUCATION PROGRAM SPEND BY CATEGORY



Remedio Provisional presents a significant cost; in FY2020, ~11,000 services were provided at a cost of 4-5x of that of SAEE. Remedio Provisional constituted only 6% of therapy services provided to students but represented nearly 30% of the total cost (Exhibit 85). This price differential could be understandable if the bulk of therapy services provided were highly specialized offerings, however the majority of therapy types being offered through Remedio Provisional are similar to the services offered through SAEE, just at a higher cost and with more fragmented usage of specialists.

By providing services via *Remedio Provisional*, PRDE is unable to secure contracts with volume pricing as they are within SAEE. PRDE should aim to address this issue by establishing a transition process for students from *Remedio Provisional* to SAEE. Additionally, PRDE should perform a pricing analysis on *Remedio Provisional* contracted service rates to ensure they are aligned to market pricing as established in Law 85-2019.

EXHIBIT 85: COST OF THERAPY SERVICES OFFERED THROUGH SAEE V. REMEDIO PROVISIONAL

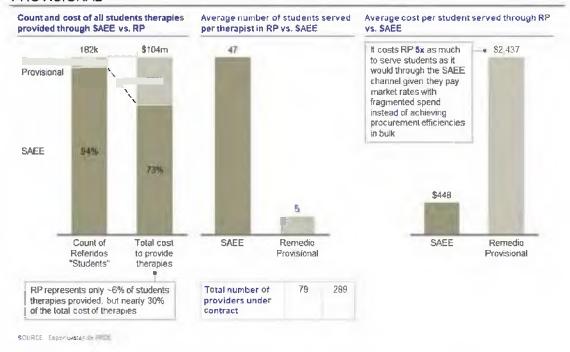


EXHIBIT 86: REQUIRED IMPLEMENTATION ACTION ITEMS FOR SPECIAL EDUCATION

equired implementation action	Deadline	FY2021 budget incentive
Create a small Central Office team (max of 8) to implement the digitization of Special Education IEP records with supporting documentation, assigned resources and related service requirements, and provide a 12-month implementation plan to the Oversight Board. At a minimum, the plan must include (1) amount of IEPs to be digitalized, (2) amount of time employees will take to carry out the project, (3) accountability measures/checks to validate accuracy of data inputted, (4) monthly milestones, (5) team members with name, employee ID contact information, and job title, and (6) project supervisor with name, employee ID, contact information, and job title.	July 2020	
Establish transition process for students from <i>Remedio Provisional</i> back to PRDE Special Education program, which will allow PRDE to serve these students within the system at more reasonable rates	Dec 2020	
Revisit Remedio Provisional's services pricing to ensure these are aligned to market rates as per Law 85-2018	May 2021	
Digitize (EP data in a manner that allows PRDE to facilitate progress monitoring, IEP compliance and resource adequacy	May 2021	\$3,000 one-time bonus for the team of existing employees that carry out the project

13.3.2 Required implementation actions

PRDE has faced several challenges, especially in the recent year. However, the Fiscal Plan aims to provide clear and tactical actions the Department can take starting in FY2021 to improve the way it delivers services to students and bring enhanced transparency, controls, and efficiencies to its expenditures.

To achieve the 2020 Fiscal Plan requirements, the Puerto Rico Department of Education must complete key operational efficiencies as outlined in Exhibit 87.

EXHIBIT 87: PRDE REQUIRED IMPLEMENTATION ACTIONS

Required Implamentation action	Deadins	FY2021 but et incentive
 Implement Kronos and time & attendance reporting policy for all school staff and institutionalize monthly reporting to the Oversight Board to improve transparency of school staff attendance. School directors must (1) validate that workable machines exist in each school. (2) provide a diagnostic of current usage, and (3) do targeted follow-ups for lack of participation. 	 December 2020 	 \$1,500 one-time bonus for school directors if Kronos is properly implemented within their schools
 Record daily student attendance on existing reporting platform SIE to better track attendance across PRDE schools, and institutionalize monthly attendance reporting to the Oversight Board to improve transparency of student attendance. 	 Dacember 2020 	
 Improve time reporting for seachers in order to reduce teacher absenteeism as measured by Kronos, and institutionalize monthly reporting to the Oversight Board to improve transparency of teacher attendance 	 May 2021 	 \$5,000 reward for schools that reach a teacher time reporting threshold of at least 95%
 Use of funds must be previously approved by the Oversight Board, particularly as it rel If schools do not open for the first semester of school year 2020-2021, PRDE and the forward or defer the initiatives until regular operations resume 		

With the above changes, as well as those outlined in *Chapter 9*, PRDE will be able to better allocate its resources to help improve K-12 student outcomes on the Island.

13.4 Department of Health (DOH)

As of 2016, the Government had several health-related agencies that were highly fragmented: three public corporations, three public hospitals, seven sub-secretaries, six regional offices, and eight program offices administering 64 federally-funded programs—all with their own support functions. Such fragmentation has driven up cost and inefficiency, as each agency is required to provide its own human capital management, procurement, and financial support. Citizen experience and care delivery have also suffered as residents face multiple handovers of individual cases across frontline staff.

Additionally, access to care on the Island lags national averages. This is especially the case outside of San Juan, given the shortage of clinics and trauma centers. Overall, there are 107 Health Professional Shortage Areas (HPSA) and 72 Medically Underserved Areas in Puerto Rico. ²¹⁸ Based on the number of additional physicians required to remove HPSA status, Puerto Rico meets 1.92% of demand for primary care (versus the 45.11% national average), 16.56% of demand for dental care (versus the 29.79% national average), and 14.57% of demand for mental health services (versus the 27.24% national average). ²¹⁹ In Puerto Rico, this fragmented and resource-constrained healthcare system has resulted in several issues, including health outcomes that are significantly poorer than national averages.

The Fiscal Plan requires that the Department of Health consolidate six of the healthcare agencies with centralized support functions: Department of Health (DOH); Medical Services Administration (ASEM); Health Insurance Administration (ASES); Mental Health and Addiction Services Administration (ASSMCA); Puerto Rico and the Caribbean Cardiovascular Center Corporation; and Center for Research, Education, and Medical Services for Diabetes (Exhibit 88).²²⁰ Consolidating these six agencies should provide the opportunity for rightsizing support functions, as well as centralizing procurement to provide savings on costly

²¹⁸ Health Resources & Services Administration, May 2020

²¹⁹ KFF data as of September 30, 2019

²²⁰ University of Puerto Rico Comprehensive Cancer Center will likely remain separate but is maintained in the Health Grouping given no formal legislation passed as of May 2019

medical materials and equipment. This new DOH should enable efficiencies while maintaining a high-quality public healthcare system.

EXHIBIT 88: AGENCIES INCLUDED IN FUTURE STATE DEPARTMENT OF HEALTH GROUPING

6 Mental Health and Addiction Services Administration

To date, the Government has achieved limited progress towards this future state. Legislation that is needed to execute the first phase of consolidation (consolidation of ASES and DOH) has stalled since December 2019, and legislation to consolidate the remaining health agencies has not been drafted. Additionally, though ASEM has made initial progress on initiatives to improve supply chain management (e.g., procurement centralization), these initiatives remain in the early stages and must be expanded significantly in order to achieve target savings. The revenue cycle management optimization initiative has also been delayed for over a year, though a third-party provider has been selected and the project is expected to launch soon. Moreover, while an Electronic Health Records (EHR) system has been deployed in the ASEM emergency room, trauma center, Adult Hospital, and Pediatrics Hospital, EHR capabilities and digital hospital management tools across DOH remain limited, creating a barrier to achieving hospital operational efficiencies.

Such lack of progress in improving the public healthcare system is particularly problematic given the major crises Puerto Rico has faced and is likely to continue to face. Most recently, the emergence of COVID-19 in Puerto Rico threatens to strain the healthcare system. COVID-19 testing per capita lags all US mainland states, ²²¹ and DOH has struggled to establish an effective, centralized process for managing testing results. Municipalities outside San Juan have found it hard to get access to tests entirely. ²²² Given the relatively high proportion of seniors and high rates of comorbidities (e.g., diabetes), Puerto Rico's population is especially vulnerable to COVID-19. Moreover, provider infrastructure has not fully recovered since Hurricane Maria, and the number of medical professionals has been declining since. While DOH has moved to counter some of these issues by coordinating patient care with private hospitals, COVID-19 still threatens to overwhelm the health system in the future.

²²¹ The Covid Tracking Project (The Atlantic); May 6, 2020

²²² NBC News "Puerto Rico mayors work to fight coronavirus with few tests available" (April 17, 2020)

Investments to enhance healthcare services

Ensuring access to high quality, affordable healthcare for all of Puerto Rico is an ongoing priority of the Government and Oversight Board. In accordance with this priority and given the increased public health needs driven by the earthquakes and COVID-19 pandemic, this 2020 Fiscal Plan recommends and includes several strategic investments in the health system. These include:

- Hospital and health facility infrastructure (\$188 million): \$158 million of recommended spending in FY2020 to address critical, near-term infrastructure needs at public hospitals (e.g., renovation of facilities in major disrepair, installation of air conditioning and purification systems, purchase of power generators) and \$110 million allocated in FY2021 to complete major capital expansions. These investments will ensure that the health system has the capacity and equipment needed to meet the long-term healthcare needs of Puerto Rico. In addition, \$5 million will be provided for capital improvements at the UPR Comprehensive Cancer Center along with ~\$25 million in funding to fully operationalize the facility in FY2020.
- Capital expansions at public hospitals (\$110 million): Bolstering capacity at public hospitals
 through major capital projects, such as construction of new wings starting in FY2021.
- Public hospital IT (\$90 million): \$70 million of recommended spending in FY2020 and \$20 million allocated in FY2021 will be provided to public hospitals to modernize technology, particularly Electronic Health Records (EHR) and digital tools for hospital management. EHR (or digital patient records) can be accessed by all clinicians involved in a patient's treatment in real-time, enabling integrated communication within and across provider facilities, and allowing clinicians to make informed decisions based on comprehensive patient treatment histories. Investing in EHR capabilities will reduce clinical/prescription errors and reduce administrative burden in public hospitals. Digital hospital management tools allow hospitals to collect and analyze data on patient flows, equipment, etc. in real-time. Investing in these tools will enable operational improvement in public hospitals.
- Telehealth infrastructure (\$5 million): ~\$5 million of recommended spending in FY2020 to implement telehealth infrastructure to address the urgent need to improve access to care outside the San Juan municipal area. Advancements in telehealth infrastructure allow patients to seamlessly receive care from physicians regardless of location. This is particularly beneficial to people living in rural areas, and to all of Puerto Rico during periods of heightened physical distancing. Funding should be invested in a telehealth platform and/or to develop access points in facilities (e.g., FQHCs) in underserved areas.
- Maintaining nurse staffing levels (\$15 million per year): ~\$15+ million in annual funding to
 ensure that the nurse staffing levels needed to serve Puerto Rico's healthcare needs are maintained. In
 addition, given the significant burden placed on nurse staff, amplified by the COVID-19 pandemic, \$157
 million has been allocated in FY2020 to grant a one-time bonus for all nurses and technicians, both in
 public and private health organizations, practicing in Puerto Rico.
- Combatting the opioid crisis (\$30 million): ~\$10 million of recommended spending in FY2020 and ~\$20 million allocated over FY2021-FY2022 to combat the opioid crises, which remains a pressing concern for Puerto Rico. The extent of the tragedy remains unknown, as data quality from Puerto Rico has been contested. Funding can be used to procure and distribute overdose reversal drugs, invest in community health events, and scale existing opioid treatment programs.
- Medical scholarships (\$30 million): ~\$10 million of recommended spending in FY2020 and ~\$20 million allocated in FY2021 to fund an independently-managed scholarship fund for healthcare (e.g., medical, dental, nursing) students and residents who commit to serving in rural and underserved areas. Many rural areas in Puerto Rico are underserved by physicians, due to lack of training opportunities, low salaries for medical residents, and difficulty becoming certified to contract with health insurance plans. The scholarship program would incentivize physicians and other healthcare providers to practice in underserved areas by providing up to \$25,000 in loan forgiveness per year of service in these areas (up to four years).
- DOH staff and materials (\$60 million): Additional staff at DOH as well as core medical materials
 and supplies. Further, DOH is eligible for \$1.2 million if they successfully conduct a back-office staffing
 capacity analysis to identify efficiencies through consolidation.

Fulfilling federal requirements

In addition, the 2020 Fiscal Plan provides funding for fulfillment of three federal consent decrees:

- Intellectual Disability Program: The Puerto Rico Division of Services for People with Intellectual Disabilities is required to have certain standards for services, and state appropriations to the program must be fully utilized to meet those standards. A Federal Court found that Puerto Rico failed to use state funds allocated for this purpose from FY2015-FY2019. Accordingly, the Fiscal Plan allocates \$20 million over four years (FY2021 to FY2025) in order to reimburse the program.
- Health 330 Centers: Puerto Rico is required to cover the difference between "reasonable costs" and what
 is reimbursed by the Medicaid Program for federally qualified health centers (FQHCs). The Fiscal Plan
 includes annual funding of ~\$50+ million to cover these "wraparound payments."
- Psychiatric hospital: The Fiscal Plan ensures that the annual budget for the Psychiatric Hospital in Rio Piedras is a minimum of \$23 million. To do this, the Fiscal Plan allocates an incremental \$6 million in FY2020 and FY2021 to enable the facility to earn its Medicare certification. Certification will drive increased revenues, which can be reinvested in the hospital to maintain full compliance with the consent decree.

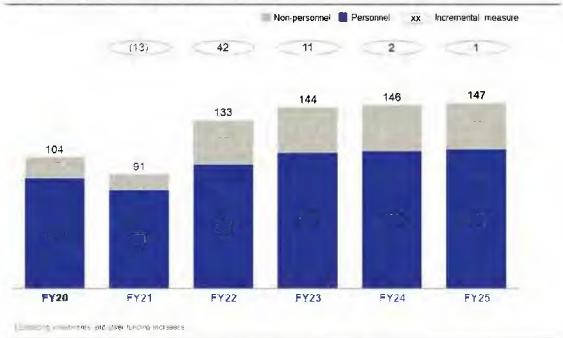
In part to counter the pressures that COVID-19 has placed on this already struggling public health provider system, the Oversight Board and the Government have made targeted investments. This additional funding has been complemented by funds from federal legislation related to the COVID-19 response, which are to be distributed across public and private sector health care providers. Major funding flows include: ~\$12-20 million from the Coronavirus Preparedness and Response Supplemental Appropriations Act, and ~\$190 million from the Families First Coronavirus Response Act.

Funding from these sources will be invested to both enable the Government's near-term response to COVID-19 and position the healthcare system to meet the long-term needs of Puerto Rico. These funds will need proper controls and management to ensure they are used effectively, which has already been a challenge for the Government. While these funds are important to meet near-term needs, without meaningful change—both through efficiency measures as well as targeted investments in the public health provider system—the Department will continue to falter in its ability to provide health services for the people of Puerto Rico.

13.4.1 Overview of efficiency actions

DOH will not be required to achieve additional savings in FY2021 over those required in FY2020 – this pause shall be used to progress implementation efforts across key operational efficiencies. From FY2022 to FY2025, DOH must achieve the personnel and non-personnel savings outlined in *Exhibit 89*.





13.4.2 Consolidating administrative and support functions

Consolidation of health agencies will enable efficiencies in administrative and support areas, including Direction, General Administration, Auxiliary Services, IT, and a portion of Hospital Administration. In addition, operational efficiencies are expected to be actualized through elimination of duplicative programs across agencies. For example, labor-intensive and/or paper-based processes are expected to be streamlined through digitization and implementation of software solutions.

Thus far, efforts to achieve required savings in this area have focused on consolidation. In FY2019, DOH conducted an analysis to identify support-function savings that could be achieved through consolidation. Legislation to enable consolidation of DOH and ASES has been submitted, and DOH and ASES have produced a high-level plan, but alignment on final design choices has not been reached and role-level transition plans have not been developed. As part of this plan, DOH and ASES have identified potential areas of improvement associated with the future-state organizational design. However, progress towards moving to the future-state organization has stalled, with agencies citing the need for the passage of legislation and leadership alignment. Furthermore, the Department has not outlined any detailed steps to achieve efficiencies. The Government has stated that opportunities related to consolidation are being identified through an in-progress roster audit and capacity analysis, however, potential efficiencies opportunities have not been shared to date, despite the fact that these initiatives were expected to be completed in March 2020 and April 2020, respectively.

Given the delays in legislation, it is critical for health agencies to identify efficiency opportunities (e.g., back-office operational improvements, cross-agency coordination, program consolidation) that are not contingent on consolidation. To date, efforts to achieve operational improvements (e.g., implementation of time and attendance reporting, digitalization of finance processes) within health agencies have been limited. Health agencies report efforts to implement memoranda of understanding (e.g., MoU 2020-00059 between ASES and DOH regarding the provision of HIV medications to indigent populations); however, none of the memoranda signed to date have driven operational efficiencies in back-office processes. Efforts must be undertaken to streamline internal management processes

and enable identification of further efficiencies. This should include completing a capacity analysis to identify duplicative roles and programs across health agencies.

13.4.3 Rightsizing of non-administrative health personnel

As the Puerto Rico population declines, spend on non-administrative payroll, such as that on allied health professionals, is expected to decline. There are several ways to do this without impacting services. For example, wages should be aligned with fair market value to reduce turnover and the associated spend on temporary/overtime workers, and roles and responsibilities should be optimized to skill level and wage rate (e.g., nurses should practice at the "top of their license"). DOH facilities should also optimize staff placement, moving underutilized practitioners to departments with need wherever possible. Best practice hospital management tools, such as shift management software, can be used to maximize efficiency. Expected savings for this category were determined using the Government's analysis of need and attrition for DOH and ASEM.

While DOH reported some savings in FY2020, these savings were driven by VTP departures, and the agency overspent payroll by \$13.5 million. Hospitals have not implemented best-practice operational tools to manage personnel, and records are decentralized and often outdated. Accordingly, agencies have been unable to provide consistent and comprehensive historical or current data on clinical staff roles. Some hospitals report target staff-to-patient ratios, but data on utilization, patient flows, and staffing levels, is not consistently collected. Furthermore, HR processes (e.g., payroll, hiring) are complex and inefficient. Simplification and streamlining of these processes can reduce administrative burden and improve operational efficiency. Public hospitals should utilize IT investments to implement digital clinical management tools that can enable consistent data collection / reporting and identification of opportunities for operational optimization.

13.4.4 Consolidating regional Medicaid offices

At the end of FY2018, the Medicaid Program within DOH had 85 offices across 78 municipalities. These must be consolidated into fewer, more strategic locations. Reducing the Medicaid office and regional hospital office footprint will eliminate duplication of effort and allow the Department to provide more robust services at convenient locations. In addition, the Medicaid Program, in concert with ASES, should redesign the Medicaid eligibility and enrollment process to be more web-based, MCO-dependent, and hospital-centric, and encourage the use of online services to improve data management.

To date, the Medicaid program has successfully reduced the number of offices to 66. Savings from this consolidation (which relate to savings on office space and equipment rental, utility expenses, and cleaning services) reached ~\$440,000 in FY2019 (out of a total of \$500,000 required), and additional office closures are being considered. Key priorities going forward relate to operational improvements and digitization for the Medicaid eligibility and enrollment process, which are discussed in *Section 15.2.1*.

13.4.5 Optimizing supply chain management

Implementation of procurement best practices and leveraging of economies of scale must also be extended to non-medical categories (e.g., office and general maintenance supplies, security services). Such initiatives are expected to be enabled by agency consolidation and operational streamlining. While ASEM has made progress in achieving savings on medical supplies (see Section 13.4.6), non-hospital procurement savings across health agencies has been minimal. To help expedite these savings initiatives, the Government should leverage its ability to utilize

the federal General Services Administration's (GSA) procurement services and rates.²²³ Full utilization of these services can drive additional procurement savings.

Procurement savings specific to hospitals are discussed in Section 13.4.6.

13.4.6 Transforming hospital management

Due to the large volume of spending on procuring medical supplies and equipment and the high cost of such materials, there is a significant opportunity to improve procurement efficiency for hospitals and health systems by focusing on commodity standardization and sourcing, indirect spending (analyzing insourcing versus outsourcing opportunities), and physician preference item optimization.

ASEM was originally created to serve as a central procurement office for Government hospitals to create economies of scale for medical supplies, devices, and services. Over time, however, procurement costs increased at a higher rate than within the broader healthcare industry, and procurement processes became decentralized across the hospitals that ASEM was created to serve. This trend can be reversed through cross-agency cooperation to leverage economies of scale.

Efforts to address this issue have begun, with the University District Hospital for Adults (UDH) working with ASEM to centralize purchasing and establish competitive bidding. These early efforts have yielded reported savings of ~\$9 million to date.²²⁴ However, the opportunity exists for more health agencies and facilities (e.g., the Pediatric University Hospital) to participate in procurement centralization and efforts should be made to expedite this crossagency cooperation.

Holistic hospital transformation efforts should also reduce payroll spend through clinical labor optimization, which is captured in *Section 13.4.3*. To date, health agencies have successfully implemented Electronic Health Records (EHR) in the Emergency Room, Trauma Center, and Operating Rooms, and at UDH and the Pediatric University Hospital. However, financial savings from EHR deployment have not been reported. As discussed in *Section 13.4.3*, hospitals should leverage investment in IT to implement digital clinical management tools in the near-term.

13.4.7 Restructuring ASEM and Revenue Cycle Management

Optimized revenue cycle management allows hospitals to improve timely collection on accounts receivables. Without leveraging software solutions and analytics, these processes can be labor-intensive and ineffective. By working with analytics experts, ASEM can increase the speed and accuracy of claims processing, improve collection rates, and maximize revenue.

ASEM has selected a vendor through a competitive process to outsource revenue cycle management. As of February 2020, ASEM expected to finalize an outsourcing contract, however, launch of the project has been significantly delayed due to the COVID-19 pandemic. As of May 14, 2020, the contract had still not been signed. Accordingly, no savings have been achieved to date. As soon as feasible, ASEM should resume efforts to launch the transition to outsourced revenue cycle management.

13.4.8 Required implementation actions

To achieve the 2020 Fiscal Plan requirements, the DOH grouping must complete key operational efficiencies as outlined in Exhibit 90.

²²³ GSA order OGP 4800.2l (July 19, 2016)

²²⁴ Health Implementation Meeting, February 2020

Required implementation action	Deadline	FY2021 budget incentive
Launch ASEM revenue cycle management initiative with engaged vendor	- June 2020	
 Develop near-term and fong-term plan to improve data consolidation capabilities and develop unified syndromic surveillance system 	 June 2020 	
 Identify common administrative and medical supplies across health agencies and public hospitals with opportunities for savings through procurement centralization 	 September 2020 	
 Develop plan to hire additional nurses to maintain FY2018 staffing levels, and optimize deployment across DOH facilities 	September 2020	
 Identify 10+ sites (e.g., FQHCs, community centers) outside San Juan for potential installation of telehealth portal 	 September 2020 	
 Identify opioid treatment initiatives / organizations for investment and partnership with DOH 	 September 2020 	
 Finalize design of medical student scholarship and identify potential federal matching funding 	 September 2020 	
 Develop proposal for hospital capital improvement projections including recommended yendors, detailed cost estimates, and timelines for completion 	 September 2020 	
 Ensure passage of legislation to enable consolidation of DOH and ASES 	December 2020	
 Conduct capacity analysis to identify duplicative roles and positions across agencies/programs and opportunities for centralization of duplicative tasks 	December 2020	 Provide additional \$1.2M of pro-fessional services budget
 Work with providers to develop action plan to enable telehealth, including required tools/software 	December 2020	
 Centralize procurement of identified administrative and medical supplies within ASEM 	December 2020	
 Develop plan to improve clinical operations, including identification of hospital management software / sofutions (e.g., EHR software) 	December 2020	
 Enact legislation to consolidate DOH and ASES and launch consolidation implementation efforts 	 March 2021 	
excluding Heapitals, Medicaid, and Intellectual Desability		

13.5Department of Public Safety (DPS)

The Department of Public Safety (DPS) is an agency grouping which was approved by Puerto Rico's Legislature in 2017 (Act 20) and includes eight bureaus responsible for **ensuring the safety and security for all residents of the Island** (*Exhibit 91*). The grouping includes the following agencies:

EXHIBIT 91: LIST OF BUREAUS IN DEPARTMENT OF PUBLIC SAFETY GROUPING

1 Puerto Rico Police Bureau (PRPB)	5 9-1-1 Services Governing Board
2 Firefighters Corps	6 Institute of Forensic Sciences
3 Emergency Medical Services Corps	7 Special Investigation Unit
4 Emergency Management and Disaster Administration Bureau	8 Department of Public Safety

Of all Commonwealth agencies, the second largest agency by spend and personnel is the Puerto Rico Police Bureau (PRPB), representing ~85% of total DPS spend. Based on reports as of July 2017, over 2,000 of the 13,000 sworn officers in the Police were fulfilling administrative roles. This situation had persisted since 2013, when a consent decree agreement with the US Department of Justice on reform measures compelled PRPB to conduct a staffing allocation and resources study to assess the proper size of the police force. This study, completed in May 2018, found that PRPB needed to rebalance its workforce and move sworn officers to non-administrative roles to improve personnel resource allocation and maximize public safety. The Fiscal Plan adopted key recommendations from the study to

outline necessary efficiency actions, including transitioning sworn officers to the field, adding civilians to backfill administrative roles, and increasing police salaries to bring to competitive levels as compared to the mainland by FY2021.

For other DPS bureaus, the 2020 Fiscal Plan requires consolidation of back-office functions and optimization of non-personnel spend, while allocating funds for priorities such as consent decree compliance, materials and equipment, additional frontline personnel for the Institute of Forensic Sciences, and salary increases for the Firefighters Corps. Specific investments and other funding are outlined below.

To date, the Department has made some progress towards consolidating back-office roles, partially implemented a time and attendance system, and digitized all forms (including the CAD system/incident reporting). The 2019 Fiscal Plan included investments in police compensation: salary, life and disability insurance, and inclusion into Social Security as part of PRPB retirement compensation to reduce the high attrition rates amongst police officers noted in previous years. Following these investments, attrition rates saw a decrease from 9% in FY2019 to 1% in FY2020.

However, several operational challenges remain. As of March 2020, PRPB reported that ~1,200 of 11,650 sworn officers were still performing administrative roles. A combination of high historical attrition rates, the agency's continued inability to hire additional civilian staff, and a push for headcount reductions through Voluntary Transition Programs (VTP) has led to a shortage of field officers and increased overtime spend. PRPB implemented two academies and recruited 263 cadets in FY2020 to address this shortage, but despite these efforts, PRPB has struggled to hire civilians and to enable more cadets and sworn officers to move into field roles.

Several DPS bureaus (such as the Institute of Forensics Sciences) have also struggled to fill vacant positions, both in field and administrative roles. As such, the 2020 Fiscal Plan highlights the need to drive actual changes in processes and back-office efficiencies, as relying on retirement incentive programs to reduce frontline staff has the potential to negatively impact service levels. The currently unfolding COVID-19 crisis further necessitates DPS bureaus to resolve recruitment issues by utilizing payroll investments provided by the Fiscal Plan (see below) to maintain service levels.

Safeguarding public safety

The 2020 Fiscal Plan includes continued investment in public safety for Puerto Rico. The below detailed investments shall enable the Bureaus to hire and retain frontline employees and work with proper and sufficient equipment. Investments include:

- Sworn police officer salary increase (~\$160 million per year): The Fiscal Plan continues the provision of funds to support the 30% increase in salary relative to FY2019 levels (which already included a \$1,500 raise per sworn officer instituted at the beginning of FY2019), provided in two installments of 15% each in FY2020 and FY2021. It also maintains increased funds for life and disability insurance (\$250 per year per sworn officer), employer Social Security contributions for all police starting in FY2020, and Law 70 contributions.
- Firefighter salaries and equipment (~\$3 million per year): The 2020 Fiscal Plan provides the funding required to preserve the \$1,500 salary increase for firefighters in FY2020. The Fiscal Plan also maintains \$2 million in FY2020 for Firefighter Corps for the purchase of equipment and materials.
- Institute of Forensics personnel and materials: The Forensics Sciences Institute has struggled, especially since Hurricanes Maria and Irma, to respond to needs on Island. It has experienced backlogs in cases and physical capacity constraints. As such, the 2019 Fiscal Plan had established an investment of \$4.7 million in payroll to enable the hiring of forensics scientists, pathologists, examiners, and DNA specialists. The 2020 Fiscal Plan continues an

investment in Forensic Sciences Institute of \$2.3 million annually, with provision for a further \$1.1 million if the agency successfully implements a recruitment drive for its specialist roles.

- Emergency Medical Corps personnel: Since 2017, EMS has registered an improvement in its response time by 14 minutes despite facing attrition of ~100 paramedics. Taking into account the unfolding COVID-19 emergency, the FY2020 Fiscal Plan provides funding to the Bureau to recruit additional paramedics and further improve response time to US mainland standards. Therefore, the 2020 Fiscal Plan also establishes an annual investment of \$1.1 million annually towards the recruitment of paramedics and dispatchers.
- Police overtime backpay: Funds are included for the final of three installments to settle backpay owed to officers for past services provided. This equals \$122 million in FY2021.

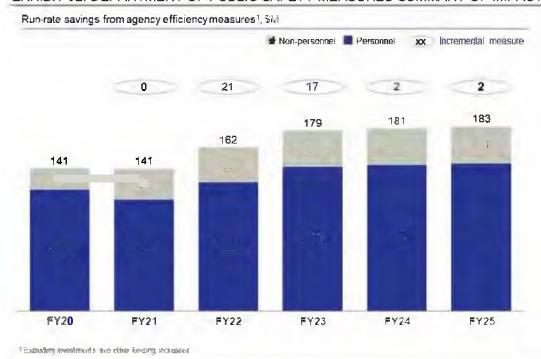
In addition, the Fiscal Plan includes funds to support compliance with federal consent decrees.

- PRPB reform: \$20 million annual investment in 212 areas of police improvement for two
 consecutive years. The Fiscal Plan includes funding to meet the requirements of the
 agreement.
- Police overtime: The Fiscal Plan includes funding for overtime pay and implementation and maintenance of the Kronos electronic timekeeping and overtime management system.

13.5.1 Overview of efficiency measures

DPS will not be required to achieve additional savings in FY2021 over that required in FY2020 — this delay in incremental measures is intended to provide the funding needed to urgently implement efficiency efforts. However, from FY2022 to FY2025, DPS must achieve the personnel and non-personnel savings outlined in Exhibit 92.

EXHIBIT 92: DEPARTMENT OF PUBLIC SAFETY MEASURES SUMMARY OF IMPACT



13.5.2 Moving sworn officers out of administrative roles and into the field

As of March 2020, PRPB reported 11,650 sworn officers, of whom ~1,200 are still performing administrative roles. PRPB should replace sworn officers currently performing civilian duties—such as mechanics, radio operators, record and report keepers, area command statistics compilers, and maintenance workers—with less expensive civilian personnel and move the sworn officers out into the communities. By doing so, PRPB will enable better services through enabling more officers to work in the field, while reducing overall expenditures for the Bureau.

The 2020 Fiscal Plan requires that PRPB move more than 1,000 sworn officers to non-administrative roles between FY2020 and FY2025 and hire an additional ~900 civilian personnel to perform the administrative functions, while also pursuing efficiency measures to reduce the overall need for administrative personnel. PRPB should do so by pursuing process optimization, digitizing incident reporting, automating time and attendance systems, and consolidating statistical reporting. Furthermore, DPS must streamline vehicle maintenance processes through superior scheduling and procurement protocols, which can reduce the need for vehicle maintenance staff.

To achieve additional efficiencies, PRPB must consolidate police stations, transit units, and specialized units to reduce the amount of administrative personnel required (e.g., station desk officers, station commanders and directors, stations auxiliary commanders and directors, and vehicle managers). Simultaneously, PRPB must eliminate units and divisions which perform duplicative services already provided by other agencies within the Government (e.g., the Divers Unit, the Rescue Squad Division).

PRPB has made progress, including successfully piloting a time and attendance system in one precinct (with plans to deploy it across all PRPB precincts by December 2020) and digitizing the incident reporting system (TIBURON/CAD). Further, due to salary and benefit raises (including Social Security and disability & life insurance) provided in the May 2019 Fiscal Plan, sworn officer attrition rates saw a decrease from 9% in FY2019 to 1% in FY2020.

However, on overall process improvements, as well as its goal of moving more sworn officers into the field, PRPB is behind. The Bureau still has 1,200 sworn officers serving in administrative roles, with a shortage of ~520 officers in the field. This is due to a lack of real back office operational improvement, struggles to hire civilian personnel, and overall attrition rates.

The Bureau has reported no savings from back-office efficiencies, and in February 2020, DPS reported that 7 officers in administrative roles had been replaced by 12 civilian employees, which is not in line with partial back-fill targets as required in the 2020 Fiscal Plan. Efforts to implement two academies and recruit 263 cadets in FY2020 have not solved current staffing shortages.

The Bureau has also struggled to recruit civilians to administrative roles, despite multiple attempts to recruit from civilian staff within government as well as external efforts. In FY2020, PRPB launched external recruitment for 187 roles, but received applications from only 134 candidates. OARTH has made 19 external sourcing attempts to fill 130 positions, with 200 applications received but no positions have been filled to date. The Department claims the limited hiring is due to non-competitive salaries for the civilian roles, additional requirements (such as thorough background checks), and academic/professional experience needed to qualify (DPS claims to have implemented multiple recruitment drives, both within the government as well as externally, to recruit for accounting, legal and, other back-office roles). However, DPS has not provided evidence to substantiate claims of non-competitive salaries or a plan for addressing any of these claimed obstacles.

Without focused action, PRPB will be unable to achieve the actions needed to transform its operations and ensure it can move more sworn officers onto the streets to improve public safety on the Island.

13.5.3 Reducing overtime

PRPB spent approximately ~\$50 million on overtime in FY2018 (excluding the emergency overtime needs resulting from Hurricane Maria). This level of overtime is considerably higher than overtime for comparable police forces in US mainland states. For instance, Connecticut, which has a similar population to Puerto Rico, had overtime spend of only ~\$28 million on a comparable basis in 2017. This gap comes even though Connecticut's total police spend per capita is ~\$140 less than in Puerto Rico²²⁵.

The Fiscal Plan, therefore, has required PRPB reduce paid overtime by 60% by FY2023, in part through the operational efficiencies noted above, as well as through moving more sworn officers into the field and through staffing models that are more effective.

While PRPB reduced overtime spend in FY2019, there has been a sharp increase in FY2020, driven by a shortage of field officers and inability to hire civilian staff. Based on latest information made available by PRPB, as of February 2020, the Police Bureau had already spent \$32.5 million, almost twice its FY2020 budget on overtime, including \$1.4 million that had been disbursed on account of the January 2020 earthquakes. However, 23% of the spend was related to payouts from previous periods. Meanwhile, additional increases in overtime are expected due to upcoming elections in FY2021. During the last election cycle, primary elections drove a ~\$10M increase in overtime spending. Additional systemic factors (e.g., policy to pay current pay rates for previously incurred overtime), drive increases in overtime pay.

Tracking and management of overtime is further complicated given a manual process and lack of centralized reporting. As a result, DPS does not have visibility into the numbers of overtime hours in a given period. A system to track overtime hours (SITAS) has been successfully implemented in Puerto Nuevo, and future expansion is expected. Schedule has 1 Phase with 3 cycles of 2,000 employees, one cycle for every month from April-June 2020. Second Phase has another 3 cycles of 2,000 employees, for the months of Oct-Dec 2020, respectively.

The Bureau should continue to advance efforts to improve tracking and management of overtime to avoid unnecessary costs moving forward.

13.5.4 Driving other DPS agency personnel efficiencies

The other DPS bureaus²²⁶ are required to consolidate back-office functions into the DPS agency to achieve efficiencies, with a 50% reduction in transitory workers starting in FY2019.

Measurable progress has been made at DPS in consolidation of back-office functions. DPS has reported that 600 employees²²⁷ have transferred to DPS from the 7 Bureaus within the grouping to perform centralized back-office functions. DPS has established direct reporting lines and process integration across all seven bureaus (for Procurement, Legal, Communications, HR and Finance), and migrated all Bureaus onto standardized system software for key back-office functions (e.g., accounting, finance, procurement), which would further ease the transition to centralized back-office operations beginning FY2021. Starting in FY2021, the DPS budget will reflect and fund a centralized back-office staff to support all

²²⁵ Connecticut Office of the State Comptroller; census data 2014; FBI Crime Justice Information Services

²²⁶ Excluding 9-1-

²²⁷ Including more than 200 positions that are currently vacant.

Bureaus within the Department. The Oversight Board is awaiting from DPS a proposed endstate organization structure, estimated staffing allocation, and an implementation timeline.

The Firefighter Corps has adopted the time and attendance system (Kronos) for administrative roles. As of now, DPS has not confirmed plans for other agencies to adapt this same system, though that would enable better transparency in personnel time allocation and payroll expenditures.

The Institute of Forensic Sciences has successfully converted 23 transitory positions into regular frontline roles, but the bureau has struggled to implement the 2019 Fiscal Plan's FY2020 payroll investment to hire additional frontline staff. The Firefighter Corps has also failed to recruit additional frontline personnel in FY2020. Both the Institute of Forensic Sciences and Firefighter Corps, as well as the Bureau of Emergency and Disaster Management, project an underspending in personnel budget in FY2020 due to personnel shortages and a lack of capacity to hire additional frontline staff.

13.5.5 Optimizing all DPS agency non-personnel spending

DPS must achieve procurement savings of 30% on FY2018 spend base. To do so, DPS should centralize and consolidate purchasing for all DPS agencies, leveraging the federal General Services Administration, utilizing e-auctions, launching competitive Requests for Proposal (RFPs), and outsourcing/contracting responsibilities.

While DPS has identified ~35 contracts for potential consolidation in the future, no estimated savings for those contracts have been communicated.

13.5.6 Required implementation actions

To achieve the 2020 Fiscal Plan expectations, the Department of Public Safety grouping must complete key operational efficiencies as outlined in *Exhibit 93*.

EXHIBIT 93: DEPARTMENT OF PUBLIC SAFETY REQUIRED IMPLEMENTATION ACTIONS

Required implementation action	Deadline
Launch external recruitment drive for civilians to fill target administrative role vacancies in DPS in FY2021	• July 2020
Outline end-state organization design (with proposed reporting structures) and operationalize consolidated back-office for shared services/functions across all DPS bureaus	September 2020
 Launch recruitment drives to fill specialist front-office roles across DPS agencies (e.g., Institute of Forensics, Firefighters, EMS) 	September 2020
Outline implementation plan to achieve overtime savings and launch initiatives to achieve rightsized staffing levels of sworn officers in field roles	September 2020
Scale up reliout of automated time and attendance system (Kronos) across all PRPB precincts and other DPS agencies (e.g., front-office personnel in Firefighters Corps)	December 2020
Outline potential initiatives to achieve other operational process improvements across all bureaus (e.g., digitization of incident reporting, consolidation of statistical reporting, streamlining of vehicle maintenance)	December 2020
Consolidate purchasing for all DPS agencies and report procurement efficiency gains	• June 2021
Complete hiring of 900 civilians to administrative roles to enable transfer of all sworn officers to field roles	- June 2024

13.6 Department of Corrections and Rehabilitation (DCR)

The Department of Corrections grouping (Exhibit 94) consists of two agencies, the Department of Corrections (DCR), which manages the functions and policies of the Puerto Rican correctional system (including penal institutions and rehabilitation facilities, for men, women, and juveniles) and the Correctional Health Department (CH), which provides healthcare to the inmates under the jurisdiction of DCR. For FY2018 DCR reported a total employee headcount of 6,695, for an adult inmate population of 9,385 and juvenile population of 156. Together, these agencies had combined FY2018 budgets of \$419 million.

EXHIBIT 94: LIST OF AGENCIES IN FUTURE STATE DEPARTMENT OF CORRECTIONS AND REHABILITATION GROUPING

d. Department of Corrections and Rehabilitation

2 Corectional Health Behartment

While DCR's reality of operating an aging prison system dependent on outdated technology necessitates a relatively high number of employees, the actual number of employees is substantially higher than comparable benchmarks; whereas DCR's FY2018 FTE-to-inmate ratio was 0.71, the 75th percentile of US states has only 0.54 FTEs per inmate.²²⁸ Besides its inmate population, DCR also served 7,122 community program participants in FY2018, a population that is three-fourths the size of its overall inmate population. In contrast, mainland US states with FTE-to-inmate ratios near 0.54 serve nearly 3.6 times as many community program participants as adult inmates in state prisons²²⁹. Additionally, while most US state prison systems are near 100% utilization, as of December 2017, Puerto Rico's prison facilities were only 78% utilized. ²³⁰

To deliver healthcare services to inmates, CH employs a hybrid management model comprising of in-house direct care providers and administrative roles, as well as contracted management of healthcare delivery through third-party vendor and healthcare providers (e.g., Physicians, Mental health professionals). While most states in the US have a direct-care model or use staff for administration and outsource healthcare, CH's model is relatively complex and unique where a contracted vendor directly manages CH's roster staff as well. In FY2018, CH spent \$8,499 per inmate to provide healthcare services, while median spend across US mainland states was \$5,763.²³¹

In 1994, the United State filed a complaint against the Commonwealth of Puerto Rico and some named officials for subjecting juveniles confined in residential facilities to conditions that deprived them of their federal rights. The Commonwealth and the named Commonwealth officials agreed to settle the matter with the United States culminating in the comprehensive 1997 Settlement Agreement. On December 12, 1997, the US District Court for the District of Puerto Rico ("USDC") entered the Settlement Agreement as an Order. The USDC appointed a Monitor to ensure compliance with the provisions in the Settlement Agreement.

In a report made for 2019, the Monitor concluded that the Department of Correction and Rehabilitation was non-compliant on three (3) provisions and partially compliant on twenty-one (21) provisions of the remaining provisions in the court approved Settlement Agreement. The non and partial compliance provisions were related to inadequate staffing levels, which hinders the security of the juveniles, and the conditions of the facilities. To address these issues, the Federal Monitor, concluded in a report that an adequate staffing analysis and a separate budget for the Juvenile Program would be conducive towards good management of the Juvenile Program. In April 2020, the USDC ordered to assign a separate budget for the

²²⁸ NASBO, FBI, BJS databases

²²⁹ Bureau of Justice Statistics, 2014

²³⁰ Census data, 2014; Bureau of Justice Statistics, 2014

²³¹ Pew Trust "Prison Health Care: Costs and Quality" Report, 2017

Juvenile Program in the amount of \$22 million. Going forward, the Oversight Board will be separately delineating a budget for the Juvenile Program at a granular concept code level. Below is the FY2021 preliminary budget intended to be certified.

The Oversight Board has not seen any progress towards achieving operational efficiencies by DCR or CH. DCR's system wide utilization of spaces for adult prisons continues to lag at 74% as of January 2020. This has mostly been driven by declines in the prison population over the past decade that have not translated into reductions in government resources dedicated to prisons. The adult inmate population in DCR has declined by 6% per year between 2014 and 2020, while total employees has been reduced by only 4% per year over the same period.

Following the earthquakes, DCR had to close a severely damaged facility in Ponce, and two other facilities were partially evacuated. Further, two additional facilities, which were reportedly consolidated in the past, had to be reopened to transfer inmates temporarily. In light of these operational challenges, as well as additional challenges emerging from the COVID-19 emergency, it is imperative for DCR to identify inefficiencies embedded in the system currently and enhance Puerto Rico's correctional facilities to make more space operationally useful and optimize delivery of healthcare service to its inmates.

While in FY2021, DCR and CH will not be held to any incremental measures, DCR and CH are expected to continue agency efficiencies in order to move toward a more efficient staffing model and facility footprint. To enable progress, the Oversight Board will make a one-time investment of \$500,000 for a feasibility study to identify major areas of disrepair and capital investment need.

The Oversight Board strongly believes that DCR must focus more carefully on how it spends its resources so that it can more successfully deliver on its mission to protect inmate and staff safety.

Supporting the correctional system

To ensure DCR makes meaningful progress in facility consolidation and improvement of its FTE-to-inmate ratio, the 2020 Fiscal Plan includes \$500,000 in additional funding for a feasibility assessment on facilities, to identify priority areas for capital investment and begin to fill major gaps in infrastructure and other features. At the conclusion of this study, the Oversight Board will provide \$5 million in capital expenditures to enable improvement of facilities.

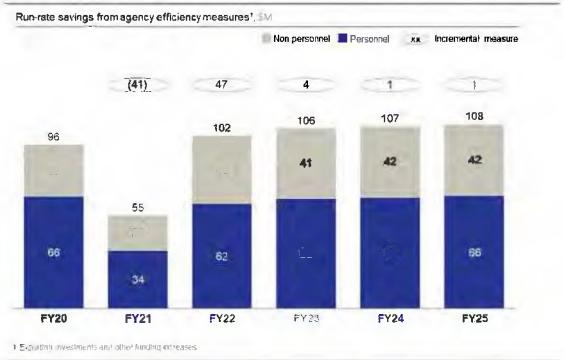
The 2020 Fiscal Plan also includes explicit funding to enable DCR to fulfill federal consent decree requirements, including:

- Corrections reform: The Fiscal Plan takes into account minimum confinement standards and inmate support at Puerto Rico Corrections facilities and ensures funding availability to meet them
- Juvenile corrections: The US District Court recently approved a \$22 million budget for the FY2021 Juvenile program following a joint recommendation from the Juvenile Program and the Federal Monitor that was appointed to the case. The Fiscal Plan includes funding to meet the requirements of the Court.
- Correctional Health reform: The Fiscal Plan provides funding to meet correctional health requirements based on the Carlos Morales Feliciano case.

13.6.1 Overview of efficiency measures

For FY2021, the 2020 Fiscal Plan does not require additional savings for DCR and CH; this pause must be used to urgently implement efficiency efforts. From FY2022 to FY2025, DCR must achieve the personnel and non-personnel savings outlined in *Exhibit 95*.

EXHIBIT 95: DEPARTMENT OF CORRECTIONS AND REHABILITATION MEASURES SUMMARY OF IMPACT



13.6.2 Optimizing the FTEs-to-inmate ratio

Personnel savings must be captured by reducing DCR FTEs per inmate to reach a target employee headcount of 5,604 to serve current inmate population of 8,855. ²³² This headcount target implies a target FTE-to-Inmate ratio of 0.63 by FY2023 in comparison to the bottom-quartile US states' benchmark of 0.54 (the prior target ratio in preceding Fiscal Plans). ²³³ Thus, the 2020 Fiscal Plan provides significant relief in personnel savings DCR is required to achieve by lowering its FTEs per inmate target. With minimum staffing needs established by law for juvenile officers and DCR's obligations towards community program participants (through socio-penal technicians), DCR must achieve headcount reduction targets through rightsizing administrative staff roles, and redirecting correctional officers currently working in administrative or civilian roles.

DCR must achieve these personnel reductions by employing back-office process efficiencies. Building internal capacity, increasing access to information technology, establishing clear measurement tools for identifying progress in implementation and quality of services rendered, identifying and training staff to assume leadership positions in Finance and Operations, having increased control over its budget, and strengthening quality assurance systems. The Oversight Board believes these changes would be conducive towards better administration of services being provided to its employees and inmate population both for adults and juvenile programs.

²³² Reported as of Jan 02, 2020

²³³ Census data, 2014; Bureau of Justice Statistics, 2014

13.6.3 Consolidating adult facilities

To bring the system in line with the requirements of the population and to increase utilization across all prisons, DCR is required to consolidate its footprint to reach an overall system utilization of 93% while maintaining appropriate separation of different inmate risk profiles and populations, including men, women, and juveniles, as required.

DCR's facilities are technologically outdated with a deteriorating infrastructure. There are additional repairs needed for plumbing, electric, roof sealings and gate repairs, among others. The January earthquakes have complicated matters significantly. A facility in Ponce had to be closed down due to a shift in the ground that affected the overall structure.

Given the FY2021 has no additional savings requirements – DCR must use this time to move forward with the consolidation of adult facilities. In FY2021 DCR is required to conduct a facility footprint and consolidation assessment study with the objective to: (1) diagnose current state of infrastructure across its facilities, (2) identify capex investment needs and (3) identify opportunities for additional facilities that could be consolidated. This assessment would serve as a guiding tool for DCR to implement the consolidation of facilities following an overarching and comprehensive approach.

DCR has reported consolidating five prisons before FY2018 and the additional closing of four prison facilities, including two juvenile facilities, a departure from Fiscal Plan expectations. However, DCR has continued to operate those facilities, at least in part, using them as storage, administrative offices, or program offices (e.g., community program, special arrests) with no savings achieved.

Though DCR has reportedly consolidated facilities, its system-wide utilization rates for facilities that house inmates continue to be low. Based on post-earthquake information made available to the Oversight Board in January 2020, DCR had to reopen two facilities to transfer inmates because of damage made by the earthquakes. DCR is now operating a total of 32 facilities with a total capacity of 12,259 spaces for 8,855 inmates, implying a utilization rate of 72%. This indicates potential for DCR to further consolidate additional facilities.

Almost 13% of total capacity is reported 'uninhabitable'. To enable improvement in habitability of this excess space, the Oversight Board provided DCR a one-time capex allocation of \$19.2 million in FY2020. However, the agency did not utilize these funds to improve habitability of spaces, instead spending the funds on regular roof repairs, perimeter gates repairs, infrastructure repairs and purchase/installation of power generators. Given lower inmate population, DCR has consistently pointed to the uninhabitable spaces in large prisons. Making these spaces habitable may be a key element to enable additional consolidations of low utilization prisons going forward.²³⁴

Completion of the feasibility study by mid FY2021 will provide additional clarity and further direction as to which facilities are idle for additional consolidation either by investing in repairs to uninhabitable spaces and making the general repairs needed to existing facilities.

While DCR implements the consolidation of its footprint, operational consolidation needs to happen for the agency to achieve savings. DCR must cease operations in facilities not currently used to house inmates and, accordingly, wind down maintenance and operating costs. At minimum, DCR would need to completely cut off utility costs (electricity, water) at these facilities, and wherever possible, identify opportunities to enable transfer of ownership to generate savings. Capital improvements on facility modernization (e.g., electronic monitoring through installation of security cameras, automated gates, etc.) can reduce dependence on front-line personnel and enable personnel efficiencies as well.

²³⁴ As of January 2020 data, 11 facilities with the lowest utilization rates had 925 inmates who could be transferred to the remaining facilities to increase system wide utilization rates to 91%

All in, the 2020 Fiscal Plan expects 40% of non-personnel operating expenditures to be captured by FY2025 for each closed facility by consolidating the physical footprint, winding down contracts, and other levers, with the remaining operating expenditures transferred to support population increases in other facilities. These savings account for the inability to reduce certain fixed costs associated with the facilities. To further enable savings from consolidations and reduced FTEs, DCR may contemplate initiatives to actively reduce the prison population as appropriate, such as alternative custody, diversion and/or credits for good behavior/program completion, programs to reduce recidivism like in-prison drug rehabilitation, and increased training and occupational programs.

13.6.4 Reducing procurement spend

In FY2018, DCR spent \$73 million on procurement, costs that can be reduced through a variety of means, including leveraging the Federal General Services Administration, utilizing e-auctions, launching competitive Requests for Proposal (RFPs), centralizing purchasing to the greatest extent possible, and outsourcing/contracting responsibilities.

In FY2019, DCR reported ~\$4 million in procurement savings through renegotiation of HMO contract for delivery of correctional health services, closure of administrative offices and Juvenile facility at Humacao. In FY2020, DCR reported a decline in the number of signed contracts (from 90 to 44) but did not reported any associated savings.

13.6.5 Improving management of prisoner healthcare

In FY2018, the Government spent \$8,499 per inmate for correctional healthcare. The 2020 Fiscal Plan requires the Government to bring per-inmate spend in line with the 50th percentile of US states and unlock savings by renegotiating existing contracts, launching competitive RFPs for key contracts that will provide terms more in-line with mainland spending practices, reconsidering level of service due to the currently declining prison population, and strategically evaluating insourcing options.

Furthermore, CH must achieve personnel efficiencies by reevaluating its staffing policies for administrative and support roles (such as paraprofessionals, pharmacists, etc.), and implementing back-office process efficiencies or centralization/digitization of common tasks across facilities.

CH reported achieving procurement savings in FY2019 through efficient inventory management, renegotiating procurement contracts with rebates, implementing generic drug buying policy, new medication formulary and clinical management.²³⁵ In FY2020, CH did not achieve savings targets and the Oversight Board provided one-time additional funding of \$8 million to cover overspend. Even as DCR has achieved procurement savings through renegotiating the correctional health HMO contract and food services contract, there are still opportunities to evaluate potential savings on other contracts in Correctional Health, including those for sub-contractors.²³⁶

13.6.6 Required implementation actions

To achieve the 2020 Fiscal Plan requirements, the Department of Corrections and Rehabilitation grouping must complete key operational efficiencies as outlined in Exhibit 96.

²³⁵ As reported by Physicians HMO – correctional health administration and management vendor

²³⁶ Contract with Carolina Catering was established prior to FY2020. However, ongoing legal proceedings with Trinity catering (prior vendor) has delayed implementation of the new contract.

EXHIBIT 96: DEPARTMENT OF CORRECTIONS REQUIRED IMPLEMENTATION ACTIONS

Required implementation action	Deadine	=Y2021 but let incentive
 Implement back-office process redesign (e.g., digitization of record keeping) to achieve personnel efficiencies and reach FY2022 headcount targets 	• July 2020	
Provide outline for facility footprint and consolidations assessment study	• July 2020	
 Provide updated roster of Correctional Health employees (direct contracted) outlining key roles and responsibilities to validate current staffing levels 	 July 2020 	
 Provide facility-level data on opex spend, list of procurement contracts and outline initiatives to achieve procurement efficiencies in FY2022 	September 2020	
 Publish facility feetprint and consolidation assessment study listing facilities to be considered for consolidation or investment required to improve habitability of spaces 	December 2020	 Provide \$5M additional Capex funds (excluding capex for Juvenile program)
 Provide assessment of healthcare spend per immate and identify initiatives to generate personnel or opex savings 	December 2020	
 Implement plan to consolidate additional facilities and improve habitability of spaces to improve system lavel utilization of existing spaces and provide supporting documentation (e.g., RFP documents submitted to proceed with consolidation) 	■ March 2021	
 Outline mitratives to reduce headcount in order to achieve target headcount in FY2022 and onward 	 March 2021 	

13.7 Department of Economic Development and Commerce (DDEC)

The Department of Economic Development and Commerce (DDEC) includes a consortium of agencies critical to incentivize and support the economic revitalization and transformation of Puerto Rico's economy. To promote growth, DDEC must enable high-impact projects, energize existing industries, and facilitate the attraction of off-Island investments to strengthen and modernize the Island's economy. Additionally, the Department manages a variety of youth and workforce development programs meant to foster qualities (e.g. entrepreneurship, job-preparedness) crucial to a growing economy. Finally, DDEC and its component agencies are charged with the implementation of structural reforms (e.g. overhauling permitting) to transform Puerto Rico into a more competitive business, tourist, and investment destination.

To ensure a streamlined economic development function and realize efficiencies, seven agencies have been slated for full front- and back-office consolidation into DDEC, with three more agencies to become assigned to the Department. Assigned agencies will consolidate their back offices into DDEC, but retain separate front offices. The agencies to be consolidated are as shown below (Exhibit 97).

EXHIBIT 97: LIST OF AGENCIES IN FUTURE STATE DEPARTMENT OF ECONOMIC DEVELOPMENT GROUPING²³⁷

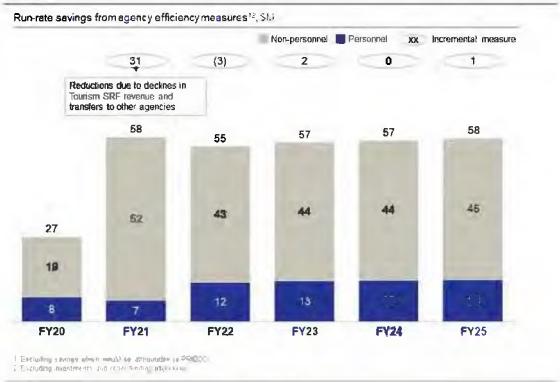
Department of Economic Development and Commerce (DDEC)	Commonwealth of Puerto Rico Regional Center Corporation
2 Puerto Rico Industrial Development Company	Local Redevelopment Authority for Roosevell Roads
3 Puerto Rico Trade and Export Company	8 Permits Management Office
4 Office of Industrial Tax Exemption	Puerto Rico Tourism Company
5 State Office of Energy Policy	19 Planning Board

²³⁷ While agency #2, Puerto Rico Industrial Development Company (PRIDCO) is expected to consolidate with DDEC, its cash flows are no longer include in the Commonwealth projections for the 2020 Fiscal Plan

13.7.1 Overview of efficiency measures

DDEC will not be required to achieve additional savings in FY2021 over that required in FY2020 – this delay shall be used to progress implementation efforts across key reforms. In Fy2022 to FY2025, DDEC must achieve the savings outlined in *Exhibit 98*.

EXHIBIT 98: DEPARTMENT OF ECONOMIC DEVELOPMENT MEASURES SUMMARY OF IMPACT



13.7.2 Consolidating operations and rightsizing personnel

The Fiscal Plan requires DDEC to consolidate 10 entities to yield significant personnel and non-personnel savings. This requires that DDEC clearly define each agency's responsibilities to limit costs and prevent overlapping duties and distinguish agency responsibilities from those of Discover Puerto Rico (DPR)—currently responsible for attracting off-Island tourists, groups, and conventions—and Invest Puerto Rico (IPR)—charged with attracting offshore investments from businesses.

The Fiscal Plan requires DDEC to realize front and back-office personnel efficiencies as the Department consolidates other agencies. Specifically, DDEC should reduce front-line personnel by 20% by FY2022 to produce a streamlined and efficient organization. In line with the findings of a Government analysis that identified a redundancy in service of back office personnel across the Department, DDEC should also consolidate back-office operations to reduce back-office headcount by 41% by FY2022.²³⁸

Further, DDEC should establish a set of key performance indicators, targets, and milestones for each of its subsidiaries to measure the performance of its subsidiaries and partners and act to address issues.

²³⁸ DDEC analysis, 2018

Pursuant to Law 141-2018, seven of the above entities will be fully consolidating into DDEC and three will be partially consolidating. To date, DDEC has made substantial progress by consolidating 70% of agencies. Five of seven agencies have moved to centralized accounting and payroll systems, with Trade and Export on track to be the sixth by June 2020. By FY2021, all agencies will have one accounting system except for PRTC, PRIDCO, RR and PB.

Although DDEC has integrated seven of ten agencies and merged agencies' back-offices into one, targets are at-risk due to PB, PRTC and RR. Due to the recent creation of the Gaming Commission and the inclusion of PRTC in DDEC's Fy2021 budget, the consolidation of PRTC as a program under DDEC must be concluded as established under Law 141-2018. The remaining outlier is the Planning Board, which has not yet been consolidated in accordance with the law and must be by FY2022. DDEC has struggled to integrate their back office given lack of cooperation from the Planning Board. Finally, a capacity analysis for the future state of DDEC, explaining the various offices and the required personnel, has yet to be presented to the Oversight Board.

Further, DDEC has only reduced headcount through Voluntary Transition Programs (VTP) or natural attrition. To achieve personnel reductions in a manner that does not compromise short-term or long-term operational capabilities, DDEC will need to analyze its personnel base and develop a targeted plan for what roles could be rationalized. Cross training employees from PRIDCO and Trade and Export must be a priority of DDEC for the first half of FY21.

13.7.3 Achieving non-personnel efficiencies

DDEC must also reduce non-personnel spend by 30% by FY2022. DDEC has yet to initiate its procurement reform which should aim to generate savings from contract renegotiations. Going forward, DDEC must focus on reviewing all its procurement contracts and identify top contenders for contract consolidation or renegotiation.

In addition to reducing procurement spend, DDEC should consolidate its physical footprint to accommodate all the programmatic areas and back office personnel and manage all tax exemptions, grants and credits under one centralized Department. Physical space consolidations are currently under way, with remodeling of PRIDCO's office space in Hato Rey to provide front office employees a space to receive citizens and businesses in a more accommodating environment. In the future state, all back-office employees will be located in the T&E building, while PRTC, PB and RR will continue to maintain the office space they currently inhabit.

13.7.4 Required implementation actions

To achieve the 2020 Fiscal Plan requirements, the Department of Economic Development and Commerce must complete key operational efficiencies as outlined in *Exhibit 99*.

EXHIBIT 99: DEPARTMENT OF ECONOMIC DEVELOPMENT AND COMMERCE REQUIRED IMPLEMENTATION ACTIONS

Required implementation action	Deadline	FY2021 budget incentives
 Publish quarterly reports in the agency's website detailing all economic incentive donation/subsidy amounts given to private corporations 	 Quarterly 	 Provide up to \$1 8M per quarte in additional operating budget
 Identify which procurement contracts have been renegotiated or are pending renegotiation or elimination (across all consolidated and ascribed DDEC entities) to the Oversight Board 	 June 2020 	
 Conduct operational needs assessment across all consolidated and ascribed entities (including PRTC and JP) to identify where to reduce front- and back-office personnel without inhibiting the performance of DDEC agencies 	 September 2020 	
- Finalize the consolidation of the physical footprint of all consolidated DDEC agencies	September 2020	
 Reduce excess front- and back-office headcount across all DDEC agencies (excluding PRTC and JP) 	• March 2021	
- Execute the administrative actions (e.g. systems integration) required to consolidate PRTC and ascribe $\it JP$	• March 2021	
Finalize procurement contract renegotiations	• June 2021	
Consolidate PB's key back-office personnel into DDEC's back office	• June 2021	
 Reduce excess front- and back-office headcount from PRTC and back-office personnel from JP in line with September 2020 operational needs assessment 	• June 2021	

13.8 Puerto Rico Innovation and Technology Services (PRITS)

13.8.1 Context and current technology landscape in the Government of Puerto Rico

The Puerto Rico Innovation and Technology Services (PRITS) was created in 2017 with the purpose of establishing an administrative structure responsible for technology strategy across the Government of Puerto Rico. The enabling Executive Order that established PRITS gave it responsibilities including: integration of technology into government management, promotion of public, private and academic projects in the technological field, creation of a digital platform to integrate the different components and government entities, generation a system of tax payment and bank transfers under Hacienda, and development of a public accountability system, among others. In March 2019, an additional Executive Order was signed which reinforced additional aspects of the leadership roles and responsibilities of PRITS. This executive ordered transferred the responsibilities of the Office of the Chief Information Officer to PRITS and established the role of the Chief Information and Innovation Officer ("CIIO") to be in charge of integrating and streamlining the government's information and communication technology processes.

In July 2019, the Government enacted Act 75 of 2019, making PRITS the office of the Executive Branch responsible for implementing, developing and coordinating the Government's public policy on innovation, and information technology ("IT"). Prior to Act 75 of 2019, the Office of Management and Budget (OMB) had been in charge of managing IT systems and implementing rules and procedures regarding the use of IT for the Commonwealth. However, there were several delays in the development and adoption of key technological reforms and little oversight in the use of technological resources. An example of this lack of efficiency was seen in cloud consumption: a centralized 4-year contract allowed government agencies to acquire new licenses without supervision, which led cloud consumption to spiral out of control

and could result in a deficit of double the original budget amount for such services; even when the Department of Treasury's mainframe is currently being underutilized by 40% to 50% each month. Lack of centralized oversight and leadership have also manifested in recent emergencies such as the hurricanes, the earthquakes, and the COVID-19 pandemic during which the government has failed to produce timely and accurate data for decision making and transparency.

Since its creation, in spite of the intent of the executive orders, PRITS has not made significant progress toward fulfilling the responsibilities it was given. Despite existing laws and regulations, PRITS has not taken active oversight over government technology strategies and budgets. The Government has largely asked for new funding for PRITS instead of re-allocating key strategic resources from other agencies to PRITS. Additionally, individual government entities have insisted in the development of new platforms instead of leveraging existing applications. Up to 20-30% of existing applications can be phased out or consolidated reducing costs and creating efficiencies between government entities. Furthermore, consolidating applications and reducing the number of datacenters and facilities enhances security by reducing the number of access points. The Government is in dire need of such enhancements in cyber security as well as establishing government wide security policies and procedures. Recently, the government suffered from various cyber security incidents impacting at least four government agencies which resulted in agencies initiating transfers of millions of dollars to fraudulent accounts. Additionally, there has been public reporting of cyberattacks that have compromised several agencies of the Government, including the Tourism Company, the Treasury Department, and the General Services Administration.

As provided by the Act 75 of 2019, the Governor has the authority to transfer to PRITS personnel, funds, budgets, documents, records, equipment, materials, and files of any other IT operational area of any agency, for use in the purposes and purposes of the Act. The Government and PRITS should prioritize creation of centralized teams with the specialized skills needed to accelerate infrastructure consolidation, and improve the Government's ability to deliver new technology solutions. Agencies continue to rely too heavily on external vendors rather than building the capabilities of PRITS to lead and manage these initiatives. Similarly, there is unclear accountability for technologies developed at the agency level. As a result, pieces of infrastructure are developed and managed separately, with dispersed accountability, creating a complex web of oversight, incremental cost and ineffective systems. As a result, pieces of infrastructure are developed and managed separately, with dispersed accountability, creating a complex web of oversight, incremental cost and ineffective systems.

13.8.2 Importance of digital modernization

Now more than ever, it is critical that the Government make effective use of its technology resources. The Government, via PRITS, must improve its capabilities in digital delivery to achieve critical benefits, including:

- Reducing expenses and improving reliability through data-center consolidation. Since 2016, the Federal Government has closed 210 tiered data centers, and over 3,000 non-tiered data centers. PRITS must implement best practices in place at the state and federal level such as: increasing use of virtualization, freezing new data centers unless compelling justification exists, and exploring the use of cross-agency share shared services.
- Rationalizing the application portfolio to ensure that resources Government-wide are directed to the highest priority initiatives. All governments face substantially higher demand for technology services than they can fulfill. In a resource-constrained environment, governments have turned increasingly to disciplined application portfolio management as a way to ensure alignment between IT spend and government priorities. PRITS must implement a Government-wide application

rationalization effort which includes proven actions, including: creating a portfolio management governance approach, establishing a baseline inventory of applications, assessing the business value and total cost of ownership of the applications, scoring/ranking them, and then creating a forward-looking plan to migrate the portfolio to higher value uses.

- Enhancing cybersecurity to prevent costly data breaches. Cyber threats continue to proliferate and government agencies globally have responded by adopting leading risk management practices. PRITS can step up the government's cyber defenses by developing a government-wide view of "crown jewels" in the technology ecosystem that must be protected, providing policy guidance to agencies setting forth evolving standards and requirements, and coordinating delivery of specialized expertise across government where the need arises.
- Improving transparency and accountability of IT spend across government and focusing on value for IT dollar spending. PRITS can be significantly aided in its work if stakeholders inside and outside of government had a clear line of sight into where IT spending is going, and what value is being delivered. Providing this transparency should be a core expectation of agencies spending government resources on technology, rather than a centralized effort that is incremental to existing IT spending.

13.8.3 Required implementation actions

In line with the four key initiatives stated above, PRITS must achieve the following objectives and milestones (*Exhibit 100*).

EXHIBIT 100: PUERTO RICO INNOVATION AND TECHNOLOGY SERVICES REQUIRED IMPLEMENTATION ACTIONS

Required implementation action	Deadline
Establish process and protocols for IT contract review of government agencies to create greater transparency on IT spend and needs of infrastructure or cloud services	 September 2020
 Develop strategy to consolidate Cloud services and on premise data- centers with a detailed migration plan to drive consolidation of infrastructure during FY21 	December 2020
 Provide a structured and exhaustive portfolio of digital initiatives, prioritizing by impact, feasibility and relevance for Central Government Agencies 	December 2020
 Ensure critical cybersecurity infrastructure, processes and control systems are set in place by PRITS and adopted by government agencies to minimize risks through clearly defined governance structures 	December 2020
 Create a protocol for PRITS to review all technology-related budget requests as part of the FY2022 Budget cycle 	December 2020
Consolidate current personnel spending and establish cross-functional teams by identifying personnel in government agencies with specialized technology skills to be centralized	 June 2021
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13.9 Legislative Assembly

As of FY2017, the size of the Puerto Rican Legislative Assembly was significantly larger than comparable legislatures in US mainland states, even when accounting for the demands of fultime legislatures and excluding the money that the Legislature spends on supporting non-profit organizations. Puerto Rico spent \$34.16 per citizen on addressable legislature expenditure, while the weighted average expenditure per capita for comparable "full-time" US mainland legislatures (e.g., in Michigan, California, New York, and Pennsylvania) was \$13.11. The variance persists even when legislative expenditure is considered as a percentage of GDP. As such, reductions to the size and funding of the Legislature are necessary to bring it in line with benchmarks and optimize government funds.

As remarked earlier in *Chapter 13*, Legislative Assembly will not be required to achieve additional savings in FY2021 over that required in FY2020. Refer to *Exhibit 101* for annual savings that must be achieved through FY2025.

Run-rate savings from agency efficiency measures 1 \$10 Non-personnel Incremental measure 12 59 58 58 52 40 40 FY24 PY20 FY21 **FY22** FY23 **FY25** I be sained investiments and office funding increases

EXHIBIT 101: LEGISLATIVE ASSEMBLY MEASURES SUMMARY OF IMPACT

13.10 General Court of Justice

The General Court of Justice, although to a lesser extent, was similarly over US mainland cost benchmarks in FY2018 (by ~35% when compared to the median cost of mainland full-time Judiciaries). As such, the 2020 Fiscal Plan continues to require that the Court implement agency efficiency measures equivalent to a 10% reduction in their annual budget.

The Court will not be required to achieve additional savings in FY2021 or beyond, as it has already experienced a 10% cut to its budget. As a result, its budget is to remain flat for the course of the Fiscal Plan.

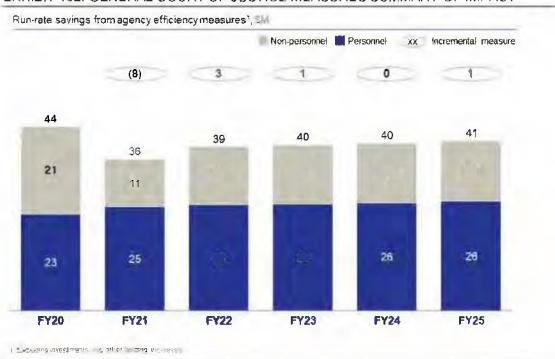


EXHIBIT 102: GENERAL COURT OF JUSTICE MEASURES SUMMARY OF IMPACT

13.11 State Elections Commission

The State Elections Commission (SEC or "CEE" by its Spanish acronym) is charged with administering elections for the Commonwealth. Given this important role, every effort must be made to ensure that SEC can thoroughly execute its mandate to promote and enable voter rights for the people of Puerto Rico in the most efficient, simplest, and least costly ways. The Oversight Board is deeply committed to supporting elections that are conducted in a fair, free, and open manner. Consistent with this objective, the Oversight Board also holds the SEC must adapt its processes to bring down the Island's cost of election administration closer to that of mainland states.

While SEC's operations are currently governed by Act 78-2011, which requires electoral balance²³⁹ and minimum staffing requirements across its programs (e.g., General administration, Permanent Registration Boards, Planning & Development of Electoral Activities, and Election Commissioners), the Oversight Board's analysis of SEC's staffing indicates that more than half of its current 650+ staff are employed in roles that are not legally required within the agency. Further, the lack of modernization in the electoral services offered by SEC (e.g., no automatic or digital voter registration channels, no provisions for vote-bymail, requirement of a separate voter ID card) further exacerbates operational and fiscal inefficiencies.

The 2020 Fiscal Plan continues to expect the SEC to reduce its steady state (non-election year) expenditures, based on FY2018, by 32% by FY2022.

To enable SEC to seamlessly administer electoral activities in FY2020, the Oversight Board approved additional one-time funding of \$5.4 million for presidential primaries and \$2.2

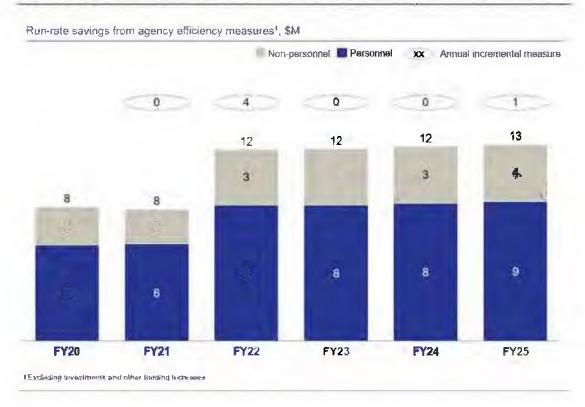
²³⁹ Implies an equal representation of the political parties across all offices and dependencies of the Commission which is applicable to all technical and administrative positions among the commission

million for local primaries. The 2020 Fiscal Plan further provides \$9.2 million for electoral activities in FY2021 and every four years thereafter, as well as ~\$5.6 million every four years starting in FY2024 for pre-electoral activities.

In January 2019, the Oversight Board asked the Governor and Legislature to adjust the operations of the SEC to fluctuate with the electoral cycle and restructure its organization to become more efficient. In April 2019, the Governor responded by agreeing that the SEC's operations must be restructured but declining to adopt the Oversight Board's request.

In January 2020, the Oversight Board represented several short, medium, and long-term initiatives that SEC could employ to achieve personnel and non-personnel savings within the covenants of the existing legal framework. These initiatives chiefly include potential to consolidate oversight of functional offices and programs, removing duplicate or redundant back-office support roles, outsourcing "Special Projects" to third-party vendors, reducing Inscription Officer roles in excess to legal requirements, and onboarding volunteers or existing staff for temporary election work.

EXHIBIT 103: STATE ELECTIONS COMMISSION MEASURES SUMMARY OF IMPACT



13.12 Agencies that promote public integrity and transparency

There is wide agreement that to drive a successful fiscal transformation within the Government of Puerto Rico, it will be important to promote public integrity and transparency at every turn. Within the Government, several agencies are dedicated to maintaining oversight and fiscal responsibility; namely, the Office of the Comptroller and the Office of Government Ethics. In line with the priorities of the Governor, the functioning of these agencies is critical to achieving the goals and ensuring the long-term sustainability of the 2020 Fiscal Plan. Accordingly, the budgets for the Office of the Comptroller and the Office of Government Ethics

will not be affected by agency-specific rightsizing measures but must still achieve Christmas bonus, uniform healthcare, and utilities savings.

13.13 All other agencies

To date, implementation progress and engagement has varied across the smaller Government agencies. Some agencies are developing meaningful tools and creative solutions to achieve savings (e.g., the Department of Agriculture planning digital solutions to reduce personnel or the Department of Environment's green tourism initiative, which could create job opportunities and tax revenues) but many have not planned to implement these effectively, resulting in slow progress to reach their savings targets.

The Government of Puerto Rico must continue looking for ways to reduce back office expenditures, align staffing levels to the volume of services required, and upgrade those services needed to accommodate for current conditions. Some success has been achieved to date in these areas. For instance, the Prosecutor Panel was able to reduce staffing levels during several months of the year to accommodate for a lower volume of work. The Utility Commission was able to consolidate all back office functions and move into one office/building. The Puerto Rico Education Council was able to consolidate State Departments in under 90 days and save over \$400K by reducing office footprint. And the Office of Women's Advocate was able to provide its employees with the necessary equipment to aid in the increased call volume after the COVID-19 emergency declaration.

Support for implementation of operational efficiencies

The 2020 Fiscal Plan provides funds for priority programs to enable provision of services and implementation of efficiencies in the following areas:

- NAP roll-out and delivery (\$1.6 million per year): From FY2021, ADSEF will receive
 funding to recruit additional staff to ensure the comprehensive delivery of the Nutrition
 Assistance for Puerto Rico (NAP) program, which is critical for thousands of households on
 the Island, especially amidst the COVID pandemic.
- Additional Justice attorneys (~\$3 million per year): The Department of Justice will
 receive additional funding to hire more attorneys in light of the trend of growing caseloads per
 existing attorneys.
- Support to eliminate the Land Registry backlog (~\$4 million): The Land Registry backlog must be resolved, and thus the 2020 Fiscal Plan includes funding in FY2021 and FY2022 for DOJ to contract services to clear prior years' backlog, aiding with making land registrations more convenient and timely

13.13.1 Required implementation actions

To achieve the 2020 Fiscal Plan requirements, all agency groupings must complete key operational efficiencies as outlined in *Exhibit 104*, with particular requirements associated with the Department of Natural Resources.

Action item	Deadline
Enact legislation for agencies consolidation	September 2020
 Conduct an analysis of non-personnel spend and prioritize major savings opportunities to be pursued 	September 2020
Develop detailed plan and timeline for achieving required utilities savings	• September 2020
Develop target organizational structure and plans for achieving personnel rightsizing; Share with FOMB	December 2020
Fully transition to target organizational state and implement personnel rightsizing	 June 2022

13.13.2 Required implementation actions related to the Volkswagen Diesel Emissions Environmental Mitigation Trust

The 2020 Fiscal Plan also notes the existence of unused funding from the Volkswagen Diesel Emissions Environmental Mitigation Trust, which has been available since January 29, 2018 but has gone unused due to Government delays in meeting the necessary requirements for accessing funds from the trust, as well as in recruitment of the necessary personnel so that development and implementation of the mitigation projects can commence. The Department of Natural and Environmental Resources was designated as the lead agency for Puerto Rico on March 27, 2020, and a high-level action plan has been developed.

EXHIBIT 105: REQUIRED IMPLEMENTATION ACTIONS RELATED TO THE VOLKSWAGEN DIESEL EMISSIONS ENVIRONMENTAL MITIGATION TRUST

Action item	Deadline
Develop Mitigation Action Plan and Administrative Order	• June 2020
Contract staff to run project administration	• June 2020
Release public notice with availability of funds under the Mitigation Action Project	August 2020
Begin disbursement of funds from the Volkswagen Diesel Emission Environmental Trust pursuant to the Second Mitigation Action Plan (DNER)	- October 2020
Evaluate funding requests and start disbursement of funds	October 2020

Chapter 14. Office of the Chief Financial Officer (OCFO)

One of the key goals of the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) is for fiscal accountability to be quickly and permanently ensconced in the Government. To fulfill this goal, the Government must create a strong Office of the Chief Financial Officer (OCFO). By centralizing key financial management functions (e.g. procurement, payroll) under a capable and well-

resourced OCFO, the Government must address long-standing issues that have arisen under the Island's historically decentralized financial management regime. These include persistent difficulties around understanding the financial needs and priorities across Government as a whole based on transparent data, timely and accurate consolidated reporting, preventing the misallocation of funds, preventing agencies from overspending their budgets, control over opening and managing bank accounts, and timely consolidated financial statement issuance. The creation of a centralized OCFO was a linchpin in the restoration of fiscal responsibility of several public entities, including the District of Columbia following its financial crisis in the mid-1990's and the City of Detroit in its Chapter 9 bankruptcy. The Oversight Board strongly stands behind the need for a centralized OCFO to place the Island on a fiscally responsible economic trajectory and restore its access to the capital markets as required by PROMESA.

The Government's efforts to create a highly-capable OCFO have been slow and disjointed. However, progress has been made in certain areas, including providing bank account transparency, weekly publication of emergency reserve reports, monthly reporting of budgetto-actuals for select Government agencies and publishing of the 2017 tax expenditure report published in September 2019. While the enhanced reporting yields some improvements in management and oversight capabilities, there is a need for more detailed reporting in several areas (e.g., payroll and attendance as well as consolidated reporting for PRDE, detailed monthly budget to actuals on component units, etc.). In essence, each relevant financial agency has improved operational capacity and accountability somewhat, but there has been little centralization and responsibilities remain unclear within the group. Operating without a strong legislative mandate, the OCFO has moved from Hacienda to AAFAF throughout FY2020. While OCFO has made recent efforts to produce more granular budgets and create detailed agency-level budget-to-actual spending reports, it has been substantially delayed in the issuance of the Government's Comprehensive Annual Financial Reports (CAFRs) (as of May 2020, the FY2017-FY2019 CAFRs have not been issued). Key financial management and administrative functions remain distributed across a half-dozen Government agencies, and the Government has yet to legislate the OCFO's organizational and governance structures or adequately staff the organization to fully execute its oversight responsibilities. Without comprehensive action, the Island's financial management capabilities will continue to fall short of best practices, the expectations of the capital markets, and the needs of the Puerto Rican people. As such, the OCFO should assume all key financial management functions across the Government—necessary to place the Island on stronger financial footing.

The core objectives of the consolidated OCFO must be to:

- Centralize treasury and liquidity management
- Enhance the budget development process by improving monitoring and performance tracking based on timely and accurate accounting practices and data
- Drive the standardization and integration of the Government's financial IT systems
- Ensure compliance with procurement, contract, and human resource management policies across Government agencies
- Ensure full implementation of pension policies across Government agencies, including Law 106 regarding the Defined Contribution system for government employees, the timely deposit of employee contributions withheld by government employers, the timely implementation of Social Security as required by the Fiscal Plan for judges and teachers, and the full repayment (with repayment plans as required) of amounts owed by government employers for PayGo obligations
- Strengthen oversight of Special Revenue Funds (SRF) through enhanced control mechanisms

- Improve the timeliness in publication of the Government's CAFRs and financial reporting
- Centralize and validate the management of Government bank accounts, funds, debts, and other financial transactions
- Ensure coordination of maximally efficient use and transparent reporting of federal funds, including both regular annual funds and disaster-related funds

Empowering OCFO to effectively manage the Government's finances is more important than ever before considering the devastating COVID-19 crisis. As part of the Federal Government's response to the pandemic, OCFO will play a central role in administering and monitoring the use of federal and Commonwealth funds meant to support the Island's recovery from the pandemic. To that end, OCFO must be prepared to comply with enhanced reporting and oversight requirements governing the use of Coronavirus Aid, Relief, and Economic Security Act (CARES) and other federal funds earmarked for Puerto Rico.

14.1 OCFO design parameters

14.1.1 Responsibilities of OCFO

The 2020 Fiscal Plan requires the Government to strengthen the OCFO in line with the following parameters during FY2021 by:

Centralizing treasury and liquidity management to:

- Enforce and manage a consolidated Treasury Single Account (TSA) for the Government that controls and offers visibility into all Government bank accounts (to the extent possible), including those of component units (CU) at private banks
- Enable all other public entities to maintain zero balance sweep accounts
- Empower OCFO to serve as the sole authority for Government bank account creation and closure—facilitating liquidity reporting, monitoring, and analysis
- Facilitate the rationalization of the Government's account portfolio to support maximization of earnings, cash pooling, daily cash sweeps and treasury operations, and implementation of uniform accounts payable and disbursement prioritization processes and reports

■ Enhancing the budget development process by improving monitoring and performance tracking to:

- Comply with the recently-issued Oversight Board budget guidelines to develop an auditable budget that is readily-traceable to the Certified Fiscal Plan
- Forecast and manage the seasonality of tax receipts
- Forecast and report the fiscal cost of tax credits
- Oversee all tax decrees and tax agreement issues
- Operationalize the financial system budget to ensure consistency between accounts and facilitate their monitoring
- Estimate, protect, and enhance tax collections and revenue streams
- Establish budgetary priorities—namely, effective expenditure controls and Government-wide procurement reforms

Driving the standardization and integration of the Government's financial IT systems to:

- Identify disparate systems being used for financial tracking and reporting
- Establish a roadmap to standardize and integrate systems to the fewest possible
- Orchestrate the integration across agencies, including defining new policies and procedures, coordinating data migration and validation, and training system users to effectively utilize new systems

The Oversight Board encourages the Government to evaluate current laws which exempt certain government entities from the Puerto Rico Government Accounting Act. Regardless, while some entities are mandated by law to maintain fiscal independence, these entities could still leverage central financial IT systems to reduce costs and automate current processes.

■ Ensuring compliance with procurement, contract, pension, and human resource management policies across Government agencies to:

- Certify all contracts, bills, invoices, payroll charges, and other evidences of claim, demand, or charge relating to the Government and entities reliant upon its taxing authority by prescribing receipts, vouchers, and claims for all agencies to leverage
- Manage centralized health insurance procurement and policy management
- Oversee human resources, Government payroll operations, and all Government-related financial transactions
- Implement uniform time, attendance, and overtime processes, payroll controls, and reporting standards

Strengthening oversight of Special Revenue Funds (SRF) through enhanced control mechanisms to:

- Implement processes that improve stewardship of all SRF
- Ensure all revenue streams attributable to SRF are deposited within the TSA

■ Improving the timeliness of the Government's Comprehensive Annual Financial Reports (CAFR) and financial reporting to:

- Produce high-quality CAFRs that follow the modified-accrual basis of accounting required by PROMESA and leverage new forecasting, e-settlement, and analytics capabilities for FY2018 onward within established regulatory timeframes
- Publish the FY2017 CAFR and provide a draft of the FY2018 CAFR by November 2020

The 2020 Fiscal Plan provides for a one-time bonus of \$1,500 to each Hacienda Central Accounting employee if Hacienda both (i) publishes and issues the FY2017 CAFR and (ii) provides a draft of the FY2018 CAFR by November 30, 2020.

- Identify and resolve drivers of historic CAFR publication delays to ensure FY2020 and beyond publications can occur within six months of a fiscal year end
- Support stronger implementation forecasting of measures required by the Certified Fiscal Plan and more robust reporting of actuals

- Supervise property tax assessment reforms, prepare tax maps, and provide notice of taxes and special assessments
- Centralizing and validating the management of Government funds, debts, and other financial transactions to:
 - Maintain custody of all public funds, investments, and cash
 - Administer cash management programs to invest surplus cash
 - Facilitate short- and long-term borrowing programs
 - Establish accountability over all Government funds, property, and assets
 - Oversee all tax decrees and agreements issued
 - Publish an annual Tax Expenditure Report that identifies and quantifies all tax expenditures²⁴⁰ (initial report published in September 2019 for tax year 2017)
- Overseeing the Implementation of the Certified Fiscal Plan to:
 - Enable all Government agencies to comply with efficiency measures stipulated within the Certified Fiscal Plan
 - Facilitate timely and targeted interventions to address areas of underperformance relative to efficiency measures

14.1.2 Authority and composition of OCFO

To execute these responsibilities, OCFO must have the power to:

- Act as the central authority over finance, budget, human resources, audit, procurement, cash management, and debt issuance matter for all entities supported by the General Fund or dependent on the Government's taxing authority
- Exercise a direct reporting line into agency CFOs (in parallel to reporting lines to agency secretaries)
- Remove any fiscal officer belonging to entities supported by the General Fund or the Government's taxing authority for violations of or non-compliance with the law—including failure to provide timely and accurate financial information
- Reform personnel policies—even through the renegotiation of existing or negotiation of future Collective Bargaining Agreements (CBAs)—in a manner consistent with the Certified Fiscal Plan's efforts to realize budget savings and efficiencies and enhance the delivery of Government services

14.2 OCFO structure and agency efficiency measures

14.2.1 Future state structure

To enable this degree of centralized management, these functions must be concentrated under a single individual: The Chief Financial Officer currently responsible for overseeing OCFO. Over time, relevant responsibilities presently distributed across various Government agencies

²⁴⁰ These include tax exclusions, exemptions, adjustments, deductions, subtractions, credits, abatements, deferrals, rebates and special rules.

should be consolidated within OCFO.²⁴¹ After this consolidation, the Government should consolidate or eliminate the following agencies (*Exhibit 106*):

EXHIBIT 106: LIST OF AGENCIES IN FUTURE STATE OCFO GROUPING

Department of Treasury (Hacrenda)	Freesury (internal antity)
Office of Management and Budget	General Services Administration
Office of Administration and Transformation of HR	Fiscal Agency and Financial Advisory Authority'
Committee and a committee of the second section of the section of the second section of the section	

Limited legislative support for OCFO consolidation and various delays around standardizing and upgrading financial systems have placed the broader benefits of a consolidated OCFO at risk. The Government has not complied with original deadlines to consolidate the requisite agencies under OCFO. Although Executive Orders can facilitate initial reforms, a broader legislative and administrative overhaul conforming to the parameters set forth within the 2020 Fiscal Plan and PROMESA is necessary to establish an effective OCFO capable of executing the responsibilities and wielding the authority outlined above. And, while Act 73 marks a step in the right direction, its primary benefits (improved visibility and budgetary controls) are contingent upon IT system upgrades and the creation of procurement boards that have yet to be realized.

Enabling improved financial stewardship

- GSA centralized procurement staff and implementation (~\$6 million per year): Starting FY2021 onwards, GSA will be funded for the staff needed to rapidly centralize procurement across the Government, focusing real effort on identifying opportunities to consolidate contracts, bring increased insight into spending, facilitating coordinated and rigorous vendor management, among other best practices.
- Additional Hacienda accountants (~\$2 million per year): Starting in FY2021, Hacienda will receive funding to hire for additional roles on the Central Accounting staff in Hacienda, so that critical skills and capabilities can be honed and retained in-house while reducing professional services spend currently needed to execute critical financial processes.
- CAFR publication (~\$100,000): A one-time bonus of \$1,500 will be provided to Hacienda Central Accounting employees if both the official 2017 CAFR is published and a draft of the 2018 CAFR is provided to the Oversight Board by November 2020.
- ERP implementation (\$36 million): Capital expenditure funding will be provided for the implementation of a new Government ERP system \$14 million for Wave 1 once a dedicated project team (at least 3FTEs) is in place, by August 2020, and them \$22 million for Wave 2 after the completion of Wave 1 between September 2020 and February 2021 (\$11 million will remain in Hacienda custody until FOMB receives and approves monthly progress reports).
- DC plan account transfer (\$2 million): During FY2021 based on progress made each quarter, up to \$2 million will be released to AAFAF for professional services, once written confirmation is submitted to the Oversight Board that segregated accounts for the DC plan have been created and funds transfers have been completed or are scheduled to be completed by the end of the fiscal year. There will be no impact on Title III fees as these amounts are preestablished on the Certified Budget.

²⁴¹ These agencies include but are not limited to: The Department of the Treasury, the Office of Management and Budget, the Government Development Bank (scheduled to be liquidated), the Office of Administration and Transformation of Human Resources, and the General Services Administration. AAFAF remains a separate entity per Government plans as of May 2020 but is included in OCFO agency efficiencies section for presentational purposes.

14.2.2 Hacienda process streamlining and personnel rightsizing

By FY2022, Hacienda should attain a 15% net reduction (25% gross) in overall costs (approximately \$33 million or \$55 million gross). 242 To do so, Hacienda could:

- Partner with private banks to reduce its real estate and personnel footprint
- Optimize non-personnel and procurement spend (e.g. support service consolidation)
- Digitize and optimize general processes to capture operational efficiencies

40% of Hacienda's gross cost reduction (approximately \$22 million) should be reinvested to bolster compliance activities and capabilities by:

- Hiring additional full-time employees for compliance activities (e.g., collection centers)
- Funding relevant technology investments to improve collection and reporting (e.g., fix challenges with SURI platform)
- Strengthening its in-house accounting capabilities and reduce its reliance on contracted accounting services
- Rolling out its internal ERP program

To-date, Hacienda has made progress in streamlining its processes, primarily by finalizing the roll-out of the SURI digital platform. The agency has also been rightsizing its personnel with headcount decreasing by 18% between FY2017 and FY2019. However, further improvements are needed in order to meet the FY2022 personnel target without compromising on its service quality.

14.2.3 Other OCFO personnel and non-personnel efficiencies

The Office of Management and Budget, the Office of Administration and Transformation of Human Resources, and the General Services Administration must also achieve significant savings as part of their consolidation under OCFO.

To date, the OCFO should have:

- Implemented the Procurement Reform Act to drive expected procurement savings across agencies
- Fully built out a new ERP system to consolidate all financial management, HR and procurement activities

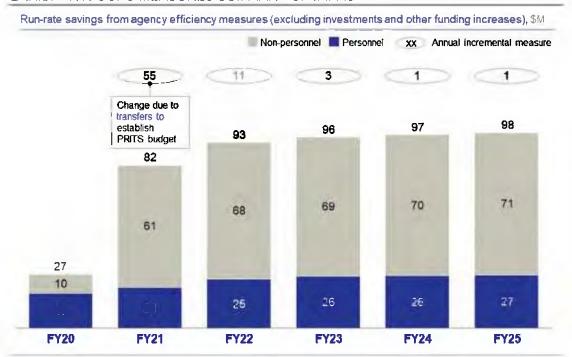
The realization of OCFO efficiencies is currently delayed, with only a third of the targeted efficiencies expected to be realized by the end of FY2020. These delays are tied to several factors, including delayed procurement optimization efforts, the absence of a plan to consolidate shared services, the lack of an HR management system and the Government's establishment of the OCFO within AAFAF. To achieve the 2020 Fiscal Plan savings projections, OCFO reforms must be implemented at the pace outlined below in Exhibit 108.

²⁴² For instance, a transformation within Her Majesty's Revenue and Customs agency (United Kingdom) reduced costs by 25% over a five-year period through a series of management initiatives, including IT cost reductions, realized operational efficiencies, reduced real estate footprint, and overall process improvements; see National Audit Office, "Reducing Costs in HM Revenue & Customs," 2011.

14.3 Looking ahead – efficiency savings to be achieved and required implementation actions

OCFO must continue driving consolidation and other reforms in order to achieve the annual run-rate savings through FY2025 outlined in *Exhibit 107*.

EXHIBIT 107: OCFO MEASURES SUMMARY OF IMPACT²⁴³



 $^{^{243}\,\}mbox{Includes}$ AAFAF and all agencies within the OCFO grouping

equired implementation action	Deadline	FY2021 budget incentive
Transfer DC plan funds from 2017 onward (located in temporary trust) into newly created segregated accounts, including payroll transfer of the employee contributions to the new DC account	 Quarterly 	 Provide an additional \$1.8M of professional services
Designate project management team (with 3+ FTEs) to monitor and evaluate the progress and completion of the Enterprise Resource Management implementation	• August 2020	 Provide additional \$14M for capex related to ERP Wave 1 implementation
Complete ERP Wave 1 implementation for the internal ERP system at Hacienda	September 2020	 Provide additional \$22M¹ for capex related to ERP Wave 2 implementation
Provide an action plan for the audit process and publication of the 2019 Comprehensive Annual Financial Reports (CAFR)	November 2020	
Publish the 2017 Comprehensive Annual Financial Reports (CAFR) and provide a draft of the 2018 CAFR	November 2020	 Provide \$104k for a \$1.5 one-time bonus for centraccounting employees
Ensure passage of legislation to enable consolidation and empower OCFO to act as the central authority over finance, budget, human resources, audit, etc. $^{\pm}$	December 2020	
Create and recruit associate Chief Financial Officer positions for the following groupings: (a) Economic Development, (b) Education, (c) Health, (d) Housing, (e) Public Safety and (f) Justice, whose authority would fall under the OCFO pursuant to enabling legislation	December 2020	
Half of this funding (\$150) = of elo Hacenda custotivant released upon FOMB approve suggest to monthly parties augmentative to the Constitution of	rogress reporting from 9 -1 2000 -	17972171

Chapter 15. Medicaid investments and reform

15.1 Current State of Puerto Rico's Medicaid program

In 2019, ~37% of Puerto Ricans received their health coverage through the Commonwealth's state-run Medicaid program; this was the highest share of Medicaid/CHIP-funded health insurance coverage of any US state. ²⁴⁴ In addition to its large covered population, Puerto Rico has lagged mainland states in both health outcomes and access. Puerto Ricans face higher rates of chronic conditions like hypertension (12.4% above national median), diabetes (4.5% above national median), and asthma (1.6% above national median) than national averages. ²⁴⁵ Puerto Rico also has higher premature birth and infant mortality rates, and higher rates of adults reporting fair or poor health. ^{246,247} At the same time, 72 of Puerto Rico's 78 municipalities are deemed "medically underserved areas," with 500 doctors leaving per year (pre-Maria). Puerto Rico has half the rate of specialists (e.g., emergency physicians, neurosurgeons) as compared to the mainland in critical fields. ^{248,249}

²⁴⁴ Kaiser Family Foundation, "Medicaid State Fact Sheets; Percent of People Covered by Medicaid/CHIP, 2019"

²⁴⁵ CDC (Centers for Disease Control and Prevention), "BRFSS Prevalence and Trends Data," 2019-2020. Behavioral Risk Factor Surveillance System

²⁴⁶ Puerto Rico infant mortality rate is 6 per 1000 vs. US mainland 5.3 per 1000; premature birth rate is 11.8% vs. 9.6% in US mainland. "Puerto Rico," World Factbook (Washington, DC; CIA)

²⁴⁷ Kaiser Family Foundation, "Medicaid State Fact Sheets: Percent of People Covered by Medicaid/CHIP, 2019"

²⁴⁸ Areas with a shortage of personal health services, e.g., areas or populations that have too few primary care providers, high infant mortality, high poverty, and/or high older adult population

²⁴⁹ HRSA Medically Underserved Areas (Accessed May 2020)

Puerto Rico's Government-funded health plan, Vital, covers individuals through three primary funding sources: federally-matched Medicaid funds, the Children's Health Insurance Program (CHIP), and the Commonwealth's self-funded insurance program for low-income adults who do not qualify for federally-matched Medicaid. An additional ~8% of the Puerto Rican population receives some benefits from the Government as part of the Platino program, which supports Medicare Advantage recipients who also qualify for Medicaid (also known as "dual-eligible").

Because federal Medicaid funding for US territories is subject to an annual cap, Medicaid expenditures eligible for federal matching exceed available funding without supplemental legislated sources. This makes Puerto Rico's Medicaid program very sensitive to rising healthcare costs. Since 2011, Puerto Rico has received temporary relief from rising healthcare costs through increased levels of federal reimbursement made available through the passage of the Affordable Care Act and the Bipartisan Budget Act of 2018. In December 2019, the Further Consolidated Appropriations Act was passed, which provided supplemental federal funding (up to \$5.7B total) to Puerto Rico's Medicaid program through September 30, 2021 (first quarter in FY2022). In addition, the law raised the FMAP-the portion of Medicaid expenditures that federal funds can cover—from the standard level of 55% to 76% for most populations. In response to the COVID-19 pandemic, the Families First Coronavirus Response Act was passed in March 2020, further increasing both the available federal funds (adding an additional \$183M) and the FMAP (increased an additional 6.2% for most populations). The available supplemental federal funds and higher FMAP will both return to standard levels in October 2021 without new federal legislation (see Section 5.1.2 for more information on Medicaid federal funds). Accordingly, the Commonwealth will hit a "Medicaid fiscal cliff," whereby it will be responsible for multi-billion-dollar annual healthcare expenditures that had been covered by federal funding since 2011. It is crucial, therefore, that ASES take advantage of the additional runway provided by recent federal legislation to put in place reforms that reduce the long-term growth rate of healthcare expenditures. Given the uncertainty as to future federal reimbursement levels, the 2020 Fiscal Plan assumes that no further supplemental funding will be provided beyond current programs, and thus, the Commonwealth must be prepared to cover growing Medicaid costs as if federal reimbursement rates reverts to steady-state levels.

15.2 Medicaid reform measures

The goal of the Puerto Rican public health insurance system is to fund high-quality health care services to all residents in need and, in doing so, cultivate a healthier population, especially as it relates to lowering outsized rates of chronic conditions. To ensure the system can continue to support the most vulnerable populations who rely on its services, **Puerto Rico will need to improve the efficiency and effectiveness of its health insurance plan by "bending the curve" on premium inflation, which is reflective of escalating costs for health care delivery on the Island.**

This section outlines several categories of actions the Government will take to both to curb the growth rate in per capita health care expenditure as well as shift the health system overall toward higher-value care. In all the below required measures, the plan seeks to avoid reduction in service quality – and in many cases reforms are expected to improve service quality – for beneficiaries.

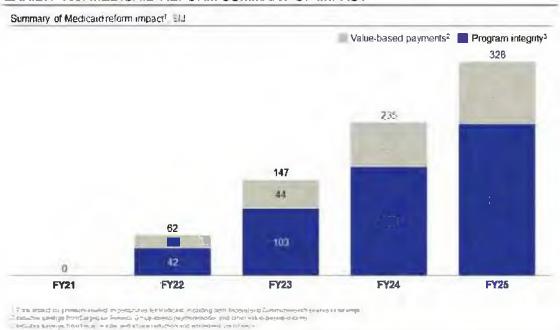
Puerto Rico's healthcare system has faced significant challenges from recent events. Unfavorable trends instigated by the hurricane (e.g., provider shortages, outstanding infrastructure needs) persist, and have been amplified by the earthquakes and COVID-19 pandemic. These circumstances make progress against healthcare measures challenging, and the availability of additional federal funding enable a more tempered path to achieving the target end-state for the healthcare system. To-date, the Government has enabled savings

through implementation of initiatives aimed at controlling healthcare cost inflation. These initiatives include the launch of the new, single-region managed care model and effectively managing the Prescription Drug List (PDL). These reforms are expected to continue to yield cost savings through greater competition, incentives to lower costs, and reduction in administrative costs.

In addition to the reforms implemented thus far, further efforts are needed to keep Medicaid cost growth at sustainable levels, ensuring that the Commonwealth Medicaid program can effectively deliver quality care to the ~37% of Puerto Ricans who rely on Vital for medical insurance, the 2020 Fiscal Plan reduces the total savings target across FY2020-FY2025 by ~\$2 billion and adjusts the ramp-up of expenditure reduction measures to provide additional time for implementation. Total run-rate savings must reach ~\$328 million by FY2025 (off the FY2025 baseline of approximately \$3.4 billion). After FY2025, the savings continue to increase as baseline expenditures increase (Exhibit 109), but absent further action by future governments, the per capita cost of healthcare will grow with long-term healthcare inflation rates (which are higher than general inflation), creating a significant deficit. The Government must still act urgently to implement value-based reforms that deliver both improvements in health services and savings to the Commonwealth, including building the infrastructure and data systems required to execute more advanced payment reform models and quality monitoring across the Island.

The measure savings in the 2020 Fiscal Plan are designed to lower premium expenditures across the multiple public health programs (namely Medicaid and CHIP). When temporary increases to available federal funding for Medicaid and the FMAP expire, the targets recognize that the federal government will realize ~3% of premium expenditure savings. While the Government must achieve all savings to curb long-term costs, the 2020 Fiscal Plan surplus will only consider savings that accrue to the Commonwealth.

EXHIBIT 109: MEDICAID REFORM SUMMARY OF IMPACT



15.2.1 Medicaid reforms to improve program integrity

The 2020 Fiscal Plan requires savings between FY2022 and FY2025 to be achieved through initiatives to improve enrollment verification and reduce other forms of fraud, waste, and abuse.

The US Government Accountability Office found evidence that MCOs have not consistently reported improper payments to providers billing to the system. Further, it found that many MCOs face conflicts of interest in finding and eliminating fraud.²⁵⁰ Typical fraud, waste, and abuse reduction programs in other state Medicaid programs and health insurers have been able to achieve 1-3% cost savings. These savings have been reached through: prepayment review (e.g., reviewing claims before payment to identify outliers/issues); auditing and enforcement units to investigate suspicious behavior; advanced analytics capabilities to identify inefficient or fraudulent activities in post-payment review, such as identification of "impossible" utilization (e.g., billing for over 24 hours of service in one day) or frequently repeated, high value procedures; and long-term policy or organizational transformation. In addition, it is imperative for Medicaid programs to ensure coverage is offered only to eligible individuals through robust enrollment verification. Since 2014, states have relied on electronic sources to confirm information for purposes of determining Medicaid eligibility. However, GAO has found that inconsistencies and errors in eligibility determinations persist. Full compliance with Payment Error Rate Measurement (PERM) and Medicaid Eligibility Quality Control (MEQC) requirements and establishment of an asset verification system that utilizes 3rd party data sources can strengthen enrollment verification.²⁵¹

To-date, Puerto Rico has made meaningful progress towards improving program integrity. This includes integration of ASES data with the Medicaid Management Information System, establishment of a Medicaid Fraud Control Unit and Program Integrity Unit, establishment of a competitive process for Medicaid contracts, and improvement in enrollment verification through employer certification and Public Assistance Reporting Information System (PARIS) checks.

While Puerto Rico has taken steps towards improving its Medicaid Program integrity, opportunities for further improvement remain. Limited recoupments from MCO investigations suggest that additional opportunity remains. Best practices from other states indicate that additional program integrity activities can be developed in parallel to development of MMIS tools. For example, there is opportunity to leverage analytics vendors on a contingent bases to identify savings related to improper payments. Furthermore, enrollment verification can be improved by instituting an Asset Verification System and partnering with key out-migration states to conduct enrollment checks. Pursuant to the 2020 Further Consolidated Appropriations Act, Puerto Rico must continue to make progress to meet CMS's Payment Error Rate Measurement and Medicaid Eligibility Quality Control requirements.

15.2.2 Medicaid reforms to improve quality relative to cost

Pursuing value-based improvement initiatives with demonstrated success can help the Commonwealth "bend the curve" on healthcare inflation without jeopardizing – and in fact while improving –health outcomes across the system. Similar value-based programs have been piloted in other states, and typically have saved between 2-10% of costs included under the programs. In Puerto Rico, value-based reforms may result in lower-than-average savings due to the breadth of other simultaneous savings measures being implemented for Vital and challenges associated with recent natural disasters and the COVID-19 pandemic.

²⁵⁰ GAO "Medicaid and CHIP Increased Funding in US Territories Merits Improved Program Integrity Efforts," April 2016 251 GAO "Medicaid Eligibility: Accuracy of Determinations and Efforts to Recoup Federal Funds Due to Errors," January 2020

Nevertheless, these structural changes to reimbursement and care delivery present the most viable path to long-term sustainability for the program.

There are several potential sources of value in Puerto Rico's healthcare system. These sources of value are opportunities to reduce wasteful healthcare spending and increase efficiency while improving quality of care and health outcomes. One potential source of value is in reducing ER visits. Prior to Hurricane Maria and the reforms, Puerto Ricans utilized the ER three times as often as peers on the US mainland, with estimates as high as 90% of ER visits occurring for non-emergency care that could be treated in lower cost settings.²⁵² Successfully shifting unnecessary ER visits to lower-cost settings, such as primary care offices or urgent care, could save tens of millions of dollars annually. Additional opportunity exists through reduction of inpatient length of stay. Puerto Rico's inpatient length of stay was 1.5 times the US average in 2014.²⁵³ MCOs can incentivize reduced hospital readmissions and length of stay through improved discharge planning and increased staffing to manage weekend discharges. Hospitals can improve quality of care and long-run costs by reducing hospital readmissions. Hospital readmissions occur when patients are discharged from hospitals but must return for additional treatment for the same condition. This can occur when patients are not adequately prepared to return home due to lack of education, lack of access to follow-up care, challenges with prescription drugs, etc. Readmission rates at hospitals in Puerto Rico are higher than the national average. Savings can be achieved by incentivizing hospitals to minimize readmissions.

Value-based payment models are an effective tool to capture these sources of value and incentivize providers to fully treat patients in more efficient ways. Pursuant to this measure, ASES has begun development of a Diagnosis Related Group (DRG)-based payment model. Under a DRG-based payment model, providers are reimbursed a fixed amount to fully treat a patient with a given medical condition. DRG-based payment models help control medical costs by incentivizing providers to deliver cost-effective care without sacrificing quality. In addition, these payment models improve the effectiveness of Medicaid service delivery by standardizing the measurement of patient acuity across providers and reducing the administrative burden associated with reimbursements, etc. ASES will begin testing this payment model in 2020 ahead of a launch in July 2021. Successful actualization of savings from this effort is necessary for the Government to fund the long-term health needs of Puerto Rico.

There are several, additional value-based payment models that can be implemented to achieve cost savings. Best practice value-based payment models from other managed care settings include direct pay-for-performance quality bonuses, providing special incentives to care for members with high-cost needs, such as behavioral health, etc. New approaches that emphasize care coordination and align incentives between patients, providers, and payors can produce improvements in health outcomes while lowering costs. Care coordination models like patient centered medical homes — which empower primary care providers to work closely with patients and manage treatment plans across multiple care providers — have been quite effective at improving outcomes for members with chronic conditions. Given the preponderance of chronic conditions and potential rising behavioral and mental health needs in the wake of Hurricane Maria, better access and coordination of mental health services will become increasingly important. The services will become increasingly important.

²⁵² JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

²⁵³ As of 2014. JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

²⁵⁴ Patient-Centered Primary Care Collaborative, "Benefits of Implementing the Primary Care Medical Home: A Review of Cost & Quality Results, 2012" (Sept 2012)

²⁵⁵ Thomas Huelskoetter, Center for American Progress, "Hurricane Katrina's Health Care Legacy" (August 15, 2015)

15.2.3 Bringing transparency to FQHC transfers

As a requirement of the 2020 Fiscal Plan, the Office of Medicaid must take immediate action to:

- Within 60 days of 2020 Fiscal Plan certification, transparently document the process by which wrap-around payments are calculated and distributed to Puerto Rico's federally qualified health centers (FQHCs), including: (i) the detailed formula for determining how prospective payments are estimated and reconciled within the Office of Medicaid, ASES, or other government entities; and (ii) the flow of funds across Commonwealth agencies, public corporations, and FQHCs.
- Within 120 days of 2020 Fiscal Plan certification, provide the Oversight Board with a provider-level reconciliation of the total FQHC transfers from Commonwealth agencies, including federally-funded portions of such transfers, for each of the last three fiscal years (i.e., beginning with FY2018); the documentation must include note of any funds currently held by FQHCs that are in dispute (e.g., as overpayment) by Commonwealth agencies.

15.3 Medicaid investments

Puerto Rico's healthcare system has experienced significant strain stemming from the hurricane, earthquakes, and COVID-19 pandemic. These events are expected to have amplified provider shortages and create increases in demand for health services, particularly behavioral health care. Given these turbulent circumstances and the uncertain outlook with respect to the COVID-19 pandemic, it is prudent to make incremental investments in the health system. Such investments are enabled by federal funding made available through the 2020 Further Consolidated Appropriations Act and the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). As a result, the Government will make certain priority investments that will apply through September 30, 2021 (the expiration of supplemental federal funding). These investments are providing Hepatitis C drug coverage and increasing reimbursement rates to specialty and primary care providers and hospitals.

Increased provider reimbursement rates

Reimbursement rates for Government Health Plan (GHP) providers lag those of Medicaid programs in other states and territories. For example, from July 2016 to July 2017 primary care services were reimbursed at 19% of the Puerto Rico Medicare fee-for-service rate, while these services are reimbursed at 66% of the Medicare rate nationally. Also, maternity services were reimbursed at 50% of the Puerto Rico Medicare fee-for-service rate while these services are reimbursed at 81% of Medicare rate nationally. Low reimbursement rates place pressure on providers and may lead to shortages, lack of access to certain specialty services, and lengthy wait times. From today through September 30, 2021, ASES will increase provider reimbursement rates as follows:

- Establish a 70% of Medicare reimbursement floor for outpatient physician services (\$100 million): Pursuant to a provision in the 2020 Further Consolidated Appropriations Act, ASES will establish a reimbursement floor for physician services set at 70% of the Medicare fee-for-service rate. The costs associated with the investment will be included in the Managed Care Organization PMPM capitation rate. In turn, the MCOs will be contractually obligated to reimburse all contracted providers at the rate of at least 70% of the Puerto Rico Medicare fee schedule.
- Increase sub-capitation payment for primary care physician (PCP) services (\$10 million): Almost all primary care services are paid through sub-capitation arrangements, wherein MCOs pay Primary Medical Groups (PMGs) a fixed, monthly rate per member treated. To improve access to primary and preventive services, ASES will include a 10% increase in the PMPM sub-capitation rate paid to PMGs for contract year 2020.
- Increase reimbursement rates for hospitals (\$45 million): According to the latest available CMS Hospital Cost Reports, over 50% of Puerto Rico hospitals reported net losses. Given the high portion of the population covered by Medicaid, Puerto Rico hospitals are disproportionately affected by reimbursement rates of the Medicaid program, which are lower than those of most other payers. These conditions jeopardize the ability for hospitals to operate and re-invest in their infrastructure. To support the ability of hospitals to meet the needs of Puerto Rico, ASES will increase reimbursement rates. Specifically, ASES will mandate that MCOs increase reimbursements for inpatient services through an episode-based payment schedule.

Hepatitis C drug coverage (\$50 million): Puerto Rico's Medicaid plan did not previously provide coverage for drugs that cure the Hepatitis C virus. There are approximately 14,000 Puerto Ricans that are eligible for treatment and could be cured by making these drugs available to them. Granting coverage for these drugs will significantly increase the quality of lives for affected individuals. Furthermore, in the long term, it is estimated that savings can be achieved due to the avoidance of costs related to the treatment of Hepatitis C virus such as decompensated cirrhosis and liver transplants. Starting in March 2020, this coverage will be available to affected Medicaid recipients.

Medicaid IT (\$50 million): Funding for capital expenditures and operational support to enable ASES to improve and modernize technology for eligibility processing and enrollment verification, and invest in analytics to identify fraud, waste, and abuse, claims cost optimization opportunities and inform value-based program design.

equired implementation action	Deadline
Incorporate language requining participation in DRG-based payment model in MCO contract	 May 2020
Define key performance indicators and savings target measures for Medicaid program integrity initiatives (e.g., fraud, waste, and abuse reduction, enrollment verification)	• June 2020
Complete assessment for the need for additional third party vendors to develop an Asset Verification System and analytics for fraud, waste, and abuse reduction and enrollment verification	• June 2020
Priot DRG-based payment model and revise design based on performance	• July 2020
Identify and design additional value-based incentives (e.g., direct pay-for-performance quality bonuses) for inclusion in future MCO agreements, including timeline and plan for implementation	December 2020
Develop plan to incorporate Medicaid program integrity key performance indicators and savings targets into future. MCO contracts, including design for associated incentives and penalties	December 2020
Complete Phase II of PRMMIS development and migrate financial and enrollment processes to the platform	• June 2021
Draft plans to meet PERM and MEQC requirements and receive CMS approval	• June 2021
Łaunch DRG-based payment model	• July 2021

Chapter 16. Tax compliance and fees enhancement

16.1 Current state and future vision for tax environment

Puerto Rico's current tax system suffers from its structural complexity, instability, internal inconsistency, inefficient administration, and inadequate enforcement. There have been at least 11 major revisions to Puerto Rico's tax code since 1994, including at least six adjustments since 2013.²⁵⁶ This has allowed for persistent problems with non-compliance, worsened by a lack of an integrated approach to addressing non-compliance. Top marginal tax rates are high relative to US federal and state taxes. Much of the Government's revenue is highly concentrated in collections from a handful of multi-national corporations. The Government has also issued an assortment of credits, deductions, and incentives that add to the system's complexity and further erode the tax base. Furthermore, audit and enforcement activity in recent years has been limited, which creates risks of increased levels of non-compliance.

Due to its compliance and collections issues, the Commonwealth has not been able to collect as many revenues from taxes as it should each year.

In response to these challenges, the Government has taken actions to improve tax compliance. It has taken steps to improve information reporting to better detect under-reporting of income and over-usage of deductions and credits, notably through recent changes to information reporting requirements included in Act 257-2018. These changes create greater interdependencies among taxpayers and the information they are obligated to report, which is expected to enable greater oversight and verification of the information being reported to the

Reforms include: Act 40-2013, the "Tax Burden Redistribution and Adjustment Act;" Act 120-2014, the "Small and Medium Business Job Generation and Retention Act;" Act 72-2015, the "Adjustments to the Internal Revenue Code of 2011;" Administrative Orders 2017-01 and 2017-05; and Act 257-2018, the "2018 Puerto Rico Tax Reform Act."

Government. Enhanced usage of data can help Hacienda better isolate risk and focus its compliance and enforcement resources. It is driving improvements in its culture and organization to boost enforcement capabilities, and digitizing the process of filing taxes, to lighten the burden of compliance on taxpayers.

With the publication of the first Tax Expenditure Report in September 2019 (see Section 16.3.1), policymakers now have the data necessary to review, assess, and adjust the use of individual tax expenditures to ensure that these foregone revenues are leading to positive economic development on the Island.

16.2 Administrative tax initiatives to increase revenue collections

By driving administrative tax reform, the Commonwealth must increase revenues over the amounts implied by baseline economic trends by \$2.2 billion over FY2020-2025, as shown below (Exhibit 111). To capture impact, measures must be implemented in full by FY2023. The 2020 Fiscal Plan recognizes the substantial economic challenges ahead in FY2021 and therefore does not assume any incremental impact beyond what was already required in FY2020.

Summary of tax compliance and fees enhancement measures impact, SM Improve compliance rate Right-rate other taxes and fees 500 462 457 450 398 400 289 285 281 300 228 232 233 200 5 100 170 169 172 174 118

EXHIBIT 111: REVENUE MEASURES SUMMARY OF IMPACT

16.2.1 Improve compliance rate

FY21

FY20

0

The Government must continue its efforts to achieve a target 5% net uplift in annual revenues due to enhanced compliance by FY2023 across the major tax lines (personal income tax, corporate income tax, and SUT) — inclusive of implementation costs. Such an improvement would be in-line with improvements seen in other tax transformations. This improvement would be relative to a reduced baseline estimate of revenue collections due

FY23

FY22

FY24

FY25

to the impacts of COVID-19, and expanded impact would not be expected to resume until FY2022. ²⁵⁷

Hacienda should continue to take a variety of initiatives that can boost voluntary compliance. The goal should be to reduce the cost of compliance while simultaneously raising the cost of non-compliance, through a combination of an increased likelihood of being caught while not paying taxes owed and more effective and enforceable penalties.²⁵⁸

- Use new systems and processes to identify and remediate non-compliance. Hacienda has taken steps to make it harder to abuse deductions and credits to avoid tax liability, for example by only allowing taxpayers to claim certain deductions and exemptions if their return is prepared by a certified public accountant following agreed upon procedures.
- Reduce the complexity of the tax system and process of filing taxes to make it easier for individuals and businesses to pay their taxes correctly. As detailed further in Section 10.4, improving the process of for filing and paying taxes is critical for improving ease of doing business, but it also helps boost voluntary compliance.
- Improve use of data and analytics to address non-compliance. Small and medium taxpayers account for a significant share of the unpaid and underpaid taxes, but only a tiny fraction of these taxpayers receive full-scale audits due to the significant time and cost investment needed. While a traditional IRS audit costs an average of \$2,278 per case, automated notices or letters can be executed for \$52 to \$274 per case. The execution increasing filings of information returns that can be used to better identify risk and focus compliance resources. Implementing data-driven, tiered compliance approaches over time will enable Puerto Rico to reach a significantly larger share of nonpayers.
- Collecting SUT on Internet sales. Nationally, the percentage of taxpayers voluntarily reporting and paying sales and use taxes on their income tax forms ranges from 0.2% to 10.2%, while nearly 80% of Americans shop online. 260,261 Mainland states have taken steps to improve sales tax collections on online sales through legislation, as well as voluntary agreements with major online retailers. 262 In its 2018 Wayfair decision, the US Supreme Court further provided mainland states with parameters under which sales taxes could be levied on out-of-state sellers. Given these trends, the Government should also be working to capture SUT on a much larger share of Internet sales. Hacienda has announced agreements with some online retailers to charge Puerto Rico SUT on Internet sales of goods. 263 With Internet sales growing at ~15% annually, and growth expected to accelerate further as the COVID-19 pandemic makes the internet a critical component of consumer purchasing habits, Internet sales tax presents an even more important opportunity going forward.

The impact from these compliance related activities is projected to phase in over the course of four years. In light of the challenging economic climate anticipated in FY2021, the 2020 Fiscal Plan does not forecast incremental increases in revenue yield until FY2022, though Hacienda will continue to implement its compliance-related initiatives.

²⁵⁷ Analogous case studies include Panama, Jamaica, and Spain, which saw 1.0 to 2.5 percentage point increases in tax ratio relative to GDP through comprehensive tax overhauls, which included compliance initiatives

²⁵⁸ Xenia Velez presentation to the Oversight Board (Nov. 30, 2017), 3

²⁵⁹ IRS Enforcement Results, TIGTA Filing Season Audit, IRS Taxpayer Advocate, Team Analysis, GAO

^{260 &}quot;Use Tax Collection on Income Tax Returns in Other States" Research Department of Minnesota House of Representatives, April 2015. http://www.house.leg.state.mn.us/hrd/pubs/usetax.pdf

²⁶¹ Tech Crunch, 2016

²⁶² Voluntary agreements occur when corporations agree through individual negotiations with states to collect and remit sales tax directly to the state

²⁶³ Caribbean Business, "Amazon to charge Puerto Rico sales tax"

16.2.2 Right-rate other taxes and fees

Prior to Hurricane Maria, the Government reported that it had already developed a plan to right-rate certain taxes and fees. These original plans, as well as any adjustments mutually agreed upon between the Government and the Oversight Board during implementation of the March 2017 Fiscal Plan, have been largely included in this 2020 Fiscal Plan, except where explicitly noted below.

Despite multiple pieces of enabling legislation, the Government's approach to implementation lacks central accountability, with specific actions and timelines. Progress against these measures has been uneven and the Government must urgently make progress to close the gap.

Gaming tax. Legislation passed in 2017 increased licenses and fees on mechanical and electronic gaming machines to \$3,000 from \$100. This was originally estimated to generate ~\$71 million in incremental revenues.²⁶⁴ Part of this calculation involved assumptions of improved enforcement, as the Government has previously estimated that it is losing approximately \$170 million per year due to illegal machines that are not paying licensing fees. However, when factoring in the potential that a 2,900% increase in taxes on the machines could decrease total revenues from gaming, the Fiscal Plans adjust the required revenues to be approximately \$46 million.

Licenses and other fees. 2017 legislation enabled fee increases in miscellaneous categories. Hacienda will determine which exact fees are to be increased to meet these minimum thresholds, achieving an overall revenue increase of ~\$57 million per year. ²⁶⁵ Categories are as follows: Charges for services; Fines; Insurance; Licenses; Permits; Rent; Royalties; Stamps; Other.

Tobacco taxes. Legislation was passed in 2017 to increase specific tobacco taxes, including taxes on cigarettes, cigars, rolling tobacco, cigarette paper and tubes, chewing tobacco, snuff, electronic cigarettes, nicotine cartridges, and vaporizers. Accounting for one-time declines in use due to price elasticities after the new law went into place, a ~\$52 million per year increase by FY2024 in revenues due to the new taxes is required. In order to give the Government time to focus on a comprehensive implementation approach, the required revenues are delayed until FY2022.²⁶⁶

Medical marijuana tax. Legislation has been enacted to tax medical marijuana. Based on an estimated 29,000 patients, the Government expected to collect approximately ~\$13 million per year in additional revenue through this initiative.²⁶⁷

Airbnb Tax. Legislation has been enacted to apply a 7% hotel room tax to Airbnb rentals, resulting in a projected annual revenue increase of ~\$3.5 million This revenue stream will be substantially impacted by the reduction in demand due to COVID-19, recovering only as the tourism sector rebounds.

16.3 Implementation and enforcement of revenue measures

The following implementation plan details the continuation of the Commonwealth's efforts to increase compliance and imposes further details on key milestones in the process to right-rate taxes and fees. To date, Hacienda has made important progress towards deploying SURI, its integrated tax system. Phases 1 and 2 of SURI have been rolled out for SUT, excise taxes and

²⁶⁴ Based on an assumption of 23,000 gaming machines on which Hacienda is able to collect fees (http://www.oslpr.org/2017-2020/leyes/pdf/ley-108-23-Ago-2017.pdf)

²⁶⁵ Assumes an 80% capture rate on the \$73M potential to account for potential elasticities in demand based on fee increases 266 Based on an 18% decline, per Hacienda (April 5, 2017 calculations)

^{267 \$15}M projected receipts, minus \$1.5M of dedicated revenues for the medical marijuana council established in 2017-Act 42 and controlled substances monitoring in 2017-Act 70

license fees and will likely have a beneficial impact on FY2020 tax compliance. Phase III has been rolled out in February 2020 for Individual Income Tax and Corporate Income Tax, with likely impact starting in FY2021. The benefits of the SURI platform include improved filing and payment capabilities, digital workflows, and integration of previously-disparate data sources. These features are expected to, over time, improve Hacienda's ability to serve taxpayers and enhance its compliance capabilities. Hacienda has also begun to make use of new information reporting and withholding requirements to limit the structural opportunities for non-compliance (e.g., through the use of alternative minimum taxes and limitations of deductions where there is no corroborating information reporting). On right-rating of taxes and fees, the progress has been mixed, with certain smaller revenue streams such as collection of tax on Airbnb rentals meeting initial expectations, with others like increases in tobacco revenues and gaming fees under-performing relative to Fiscal Plan requirements. Hacienda must comprehensively assess progress against these categories of revenue enhancement and develop action plans to mitigate future under-performance.

16.3.1 Creation of a tax expenditure report and regular reporting

In order to provide a critical element of fiscal responsibility and transparency, the Government must regularly produce a tax expenditure report, which will include a comprehensive list of revenue losses attributable to provisions of the Puerto Rican tax code that deviate from the tax structures benchmark law. Having a clear and accurate understanding of what the Government spends through tax expenditures is critical to ensuring the expenditures are continuing to contribute to economic growth and opportunity.²⁶⁸

In response to the 2019 Fiscal Plan requirements, the Government published its inaugural Tax Expenditure Report in September 2019 for tax expenditures associated with tax year 2017. For the first time in Puerto Rico's history, taxpayers and the Government now have better visibility into the full scope of tax expenditures being offered, together with a description and approximate cost of each expenditure.

Additional revisions are required to tax expenditure reporting. For future iterations, the Tax Expenditure Report must include the cost of each tax expenditure for the current year and at least the prior two years. The report must also forecast the expected revenue collections and losses for at least the next five years from the date the report is produced. The forecast of revenue losses must include a comprehensive inventory of all tax credits, cash grants, deductions, exemptions, preferential tax rate, tax liability deferral and any other tax incentives where amounts allocated can materially impact the Commonwealth's financials.

16.3.2 Tax incentives code reform

The current tax incentives code structure has high fiscal costs – in excess of \$400 million – but does not provide enough visibility to allow for clear tracking of these tax concessions and the returns they generate for Puerto Rico's economic growth. Past studies, based on limited available economic data, have indicated that while some tax incentives led to positive returns on investment, many others do not yield similar results.

That is what led the Commonwealth to enact Act 60-2019 (the "Puerto Rico Tax Incentives Code" or "Incentives Code"), which amended the tax incentives code and adopted a new legal and administrative framework to normalize the way in which new incentives are created, approved, processed, and monitored. Existing incentive laws were repealed and replaced by similar incentives in Act 60-2019.

To evaluate the fiscal benefit from each incentive, the legislation uses a Return on Investment ("ROI") approach combined with an assessment of fiscal multipliers to prioritize high value-

²⁶⁸ Tax Policy Center, Urban Institute & Brookings Institution, "State Income Tax Expenditures"

added incentives relative to those that do not generate sufficient economic return. The legislation, however, does not include explicit caps on, reductions to, or the elimination of any specific incentives. Rather, the purpose of the Incentives Code is to measure the ROI of tax and economic incentives by grouping them under a transparent and uniform code.

Through the Incentives Code, the term, rate, and characteristics of incentives offered are harmonized across industries and credits. The Incentives Code also creates a centralized Incentives Office for Businesses in Puerto Rico at DDEC and establishes an Incentives Concession Portal to centralize, standardize, and streamline the processes related to the application and approval of decrees, cash grants, tax credits, subsidies, and other incentives.

Act 60-2019 also required the public disclosure of beneficiaries of certain tax expenditures. In accordance with that requirement, DDEC disclosed (on January 30, 2020) that 8,364 companies and individuals received certain tax incentives. The online database offers the name of the grantee, the type of benefit, and the decree's issue date. At the moment, DDEC released the relevant information for recipients that receive benefits from the following Acts: Act 14-2017 (Physician Retention); Act 20-2012 (Exportation of Services); Act 22-2012 (Investor Relocation); Act 273-2012 (International Financial Center Regulatory Act); and Act 27-2011 (Film Production). DDEC subsequently released additional data on February 11, 2020, disclosing recipients of the following tax expenditures: Act 73-2008 (Economic Incentives for the Development of Puerto Rico Act); and Act 83-2010 (Puerto Rico Green Energy Incentives Act).

Many provisions of Act 60-2019 require the drafting and approval of regulations prior to their implementation. 269

The lack of transparency and high cost of these tax concessions warrant additional reform in the tax incentives code. In addition to public disclosure of the amount and type of tax incentives awarded as part of the tax expenditure report, a value-for-money assessment for these tax concessions needs to be conducted to increase the rate of return on investment to Puerto Rico. Subsequently, based on the findings of this formalized assessment and explicit annual budget, the Government should implement a reform on the existing tax incentives code, to better align the tax concessions awards to the growth strategy of Puerto Rico.

16.3.3 Principle of Revenue Neutrality

Puerto Rico needs to drive toward more formality and increased compliance within the tax base, but it cannot lose revenues in the process. Therefore, any tax reform or tax law initiatives that the Government undertakes or pursues during a year within the 2020 Fiscal Plan period must be revenue neutral, that is, all tax reductions must be accompanied by specific, offsetting revenue measures of the same amount that are identified in the enabling legislation. Each tax measure must also include confidence building elements, such as behavioral adjustments and reasonable capture rates. To ensure revenue neutrality, the implementation of any tax law initiatives must occur sequentially, with the Government ensuring that initiatives are paid for before rates are reduced. Enforcement mechanisms must also be part of any tax initiative package to prevent a scenario where tax reductions are not accompanied by sufficient offsetting revenue measures identified in the enabling legislation.

16.3.4 Required implementation actions

To achieve the 2020 Fiscal Plan revenue measures, certain action items must be implemented according to the schedule described in *Exhibit 112*.

²⁶⁹ Pursuant to PROMESA section 204(b)(4) and the Oversight Board's policy with respect thereto, proposed rules, regulations, administrative orders and executive orders covered by said policy, including all regulations under Act 60-2019, must be submitted to the Oversight Board before being issued to ensure compliance with the certified Commonwealth Fiscal Plan.

EXHIBIT 112:	REVENUE	MEASURES	SHMMARY	OF IMPACT
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Required implementation action	Deadkne
 Finalize the integrated plan for the next phase of compliance improvement across the major tax types and assess the resources needed to support the activities identified 	December 2020
 Develop resource plan to implement next phase (personnel, IT, other support) as needed to drive progress against key initiatives 	• March 2021
Implement process to estimate the impact of compliance efforts on revenue collections to inform future program priorities	• June 2021

Chapter 17. Reduction in appropriations to UPR

Current state and vision 17.1

The central Government provides a range of appropriations to three main groups of recipients: The University of Puerto Rico (UPR), Puerto Rico's 78 municipalities, and "other" recipients (typically private industry or non-profit institutions).

The University of Puerto Rico, founded in 1903, is Puerto Rico's largest and main university system. Its mission is to serve the people of Puerto Rico, contribute to the development and enjoyment of the fundamental values of Puerto Rican culture, and uphold the ideals of a democratic society. To advance its mission, UPR strives to provide high-quality education and create new knowledge in the Arts, Sciences, and Technology. UPR has a history of academic excellence, with 694 degree-granting academic and professional certification programs, including six first level professional degree programs and 34 PhD programs. The university system is also an important center of research; for example, the Rio Piedras campus is classified as a high research activity university by the Carnegie Foundation (one of only 335 US universities to receive such a designation) and there are 79 separate research centers across the university system. UPR also plays a critical role in providing avenues for social and economic advancement, with 68% of students receiving Pell grants.²⁷⁰

In FY2018, UPR was 67% subsidized (~\$678 million in annual appropriations) by state and local funds, compared to an average 25% state and local subsidization for US public universities.²⁷¹ In FY2018, UPR's undergraduate tuition was less than one-third of the US average for public universities, even after adjusting for per-capita income, and more than 40% below the average tuition of private universities on the Island.²⁷² Yet, during the past decade, UPR has seen a 24% enrollment decline (13% since FY2018) across both graduate and undergraduate populations. Moreover, UPR consists of 11 independent campuses with minimal shared services or administrative consolidation. As a result, UPR has grown reliant on the significant subsidies from the Commonwealth, and has made slow progress in addressing declining enrollment, diversifying its revenues, rationalizing its tuition and scholarship systems, renewing and maintaining its infrastructure, addressing operational

²⁷⁰ UPR 2012-2017 Strategic Plan

²⁷¹ UPR, IPEDs 2016 College Board

²⁷² Represents the average across the Ana G. Mendez University system, Inter-American University, Sacred Heart University, and Polytechnic University for SY18-19.

inefficiencies, appropriately funding its pension system, and paying its contractually-obligated debt.

Establish an independent needs-based scholarship fund for UPR

The Fiscal Plan and Certified Budget assigned funds to establish an independently-managed needs-based scholarship fund to benefit the students of the university system. This fund will be used to provide need-based scholarships to UPR students." As such, this year's Government contribution to the scholarship fund is projected at ~\$43 million.

In April 2020, an RFP process was started in order to provide Fund Administration Services and Trust Services to AAFAF with respect to the scholarship endowment trust fund. The RFP was awarded in May 2020 to *Fundación Comunitaria*. The fund is expected to award the first scholarships in August 2021, as the application process is expected to be conducted between March and June of the same year.

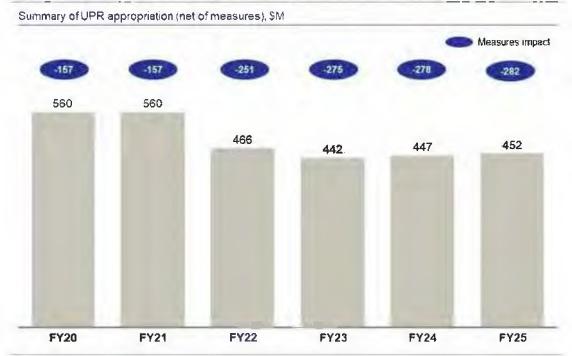
Establish an independent scholarship program for medical students who commit to practice in underserved areas

The 2020 Fiscal Plan creates an additional independently-managed scholarship program to incentivize doctors to practice in underserved areas in Puerto Rico. Many rural areas in Puerto Rico are underserved by physicians, due to the lack of training opportunities, low salaries for medical residents, and difficulty becoming certified to contract with health insurance plans. This has resulted in a shortage of ~500 primary care, mental health, and dental providers (according to HHS). Accordingly, the 2020 Fiscal Plan allocates funding for a loan forgiveness program to be offered to medical residents or students. Each student or resident would be eligible for up to \$25,000 of loan forgiveness per year of service (up to four years) in underserved areas, and the program would be administered by an independent party chosen via a competitive process. The 2020 Fiscal Plan recommends that the Government invest \$10 million in FY2020 and allocates \$20 million for investment in FY2021. This program directly responds to the increased need for healthcare providers in rural areas following the COVID-19 pandemic and is representative of the 2020 Fiscal Plan's commitment to protecting the health of the people of Puerto Rico. To ensure timely implementation of the program, UPR, in concert with AAFAF and the Oversight Board, must undertake the initiatives described in *Exhibit 114*.

17.2 Key initiatives to reduce appropriations

Reducing Commonwealth subsidies to UPR must lead to run-rate savings of ~\$282 million by FY2025 (Exhibit 113).

EXHIBIT 113: REDUCTION IN APPROPRIATIONS MEASURES SUMMARY OF IMPACT



A reduction of the appropriation for UPR was determined in 2017 through a shared process with the Government to identify reasonable, sustainable measures to bring UPR closer to US mainland public university tuition and administrative cost benchmarks, while maintaining (and in many cases improving) the performance of the system, which serves as a primary economic growth engine of the Island. It reflects both the declining enrollment of the university as well as the sizeable opportunity to diversify revenue sources, transform operations through greater utilization of shared services and other administrative streamlining across its 11 campuses. In light of the COVID-19 pandemic, the Oversight Board has agreed to provide a one-year pause in the further reduction of UPR's annual appropriation to enable UPR to focus all its efforts on implementing the efficiencies previously required and not completed. The 2020 Fiscal Plan therefore maintains the UPR subsidy level at 54% in FY2021. Thereafter, a gradual decrease in the UPR appropriation will continue as previously envisioned to ~\$452 million by FY2025.

EXHIBIT 114: REQUIRED ACTION ITEMS TO UPR SCHOLARSHIP PROGRAM FOR MEDICAL STUDENTS

Action Item	Deadline
 Finalize the program's design, including the terms of the agreement between the program and its beneficiaries, and launch an RFP to identify a third-party provider 	September 2020
 Select the third-party provider and finalize contracts 	• December 2020
Finalize application and selection process and execute awareness campaign	 March 2021
Launch application and selection process	■ June 2021

Chapter 18. Municipal services reform

18.1 Current state

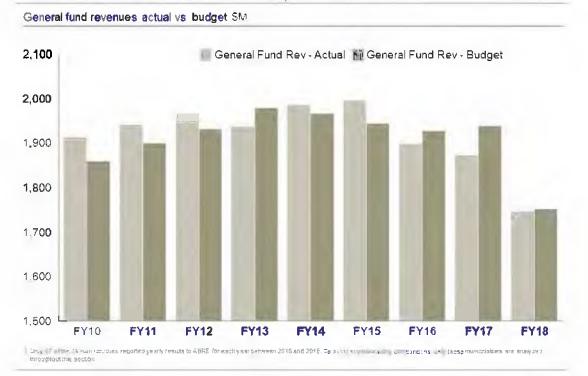
Puerto Rico's 78 municipalities are also recipients of Commonwealth appropriations. To incentivize a new operating model between the territory and municipal governments, as well as municipal operational changes, prior Fiscal Plans reduced Commonwealth appropriations to municipalities. In FY2018, the total municipal appropriation was \$220 million (a reduction of \$150 million relative to the prior year). In FY2019, it was reduced to \$176 million, and in FY2020, as stipulated in the 2019 Fiscal Plan, it was further reduced to \$132 million. Over the past two years, however, there has been little meaningful progress on redefining the relationship between the territorial government and municipalities, almost no decentralization of responsibilities, and no expenditure-sharing. Moreover, municipalities have made little (if any) progress towards implementing the fiscal discipline required to reduce reliance on Commonwealth appropriations and better reflect a declining population in many areas. The lack of fiscal management is now being exacerbated by the COVID-19 pandemic, threatening the ability of municipalities to provide necessary services, such as health, sanitation, public safety, and emergency services, to their residents and forcing them to prioritize expenditures.

Over the last decade, Puerto Rico's population has declined by ~18% and it is projected to continue declining going forward. Given that and absent any other structural reorganization of responsibilities, municipalities must pursue consolidation of services across multiple municipalities to enable better and more efficient services for Puerto Rico residents. Moreover, consolidation would significantly reduce costs by leveraging scale, especially in areas of services provided directly to residents, such as garbage disposal and maintenance of municipal buildings and roads.

A further review of historical trends of municipalities' fiscal condition validates the challenge of operating with declining resources. Analysis of data produced by ABRE Puerto Rico, a non-profit that evaluates municipality finances, from "fully-reporting" municipalities demonstrates a pattern of inability to operate within budget targets (*Exhibit 115*).²⁷³

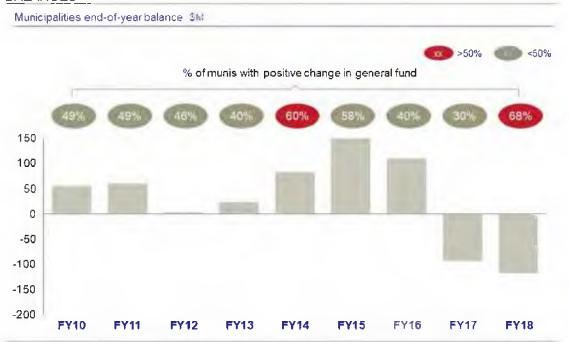
^{273 &}quot;Fully-reporting" municipalities are defined as the 57 municipalities (out of the 78 total) that reported yearly results to ABRE Puerto Rico for each year between 2010 and 2018. To avoid any misleading comparisons due to inconsistent data availability, only these municipalities are analyzed throughout this section.

EXHIBIT 115: GENERAL FUND REVENUES, ACTUAL VS. BUDGET



In any given year, less than half of the fully-reporting municipalities often recorded a positive change in general fund balance due to budget shortfalls, and approximately 40% are dependent on Commonwealth appropriations to operate. From FY2010 to FY2018, these municipalities' aggregate General Fund balances declined from \$55 million to negative \$118 million (*Exhibit 116*). These repeated budget shortfalls put further financial strain on the following years, driving negative fund balances that have required persistent Commonwealth support and/or increased borrowing. As currently operating, many of the municipalities are not fiscally sustainable.

EXHIBIT 116: FULLY-REPORTING MUNICIPALITIES' END-OF-YEAR GENERAL FUND BALANCES



In total, municipalities have been able to reduce long-term debt (excluding pensions), but this is primarily due to limited access to credit, particularly after the liquidation of the Governmental Development Bank (GDB) (Exhibit 117).

EXHIBIT 117: FULLY-REPORTING MUNICIPALITIES' DEBT AND DEBT PAYMENTS



Many mayors argue that municipalities have been given unfunded mandates by the Commonwealth to provide basic services, and many point to this as a major cause of their

budget deficits. During the recent COVID-19 pandemic, municipal governments did take over some central government responsibilities, such as food delivery, and have shown leadership with testing and contact tracing. However, these actions have often not been intentionally planned, and thus municipalities have difficulty keeping track of such expenses, which is critical to qualify for the FEMA reimbursement process under the National Emergency Declaration. As well, given the poor centralized accounting and data collection of the Commonwealth, it is difficult to segregate central costs at a municipal level, even though the Commonwealth has regional offices and employees in nearly every municipality of Puerto Rico. Given the Commonwealth's extensive regional service infrastructure, there are definitely redundancies with municipal governments in several areas.

On the revenue side, improving collections has the potential to increase annual revenues for municipalities. The Municipal Revenue Collection Center (CRIM), which operates property tax collection on behalf of municipalities, must establish a program to improve collections on existing properties, reclassify properties that are currently erroneously categorized (residential v. commercial), and pursue strategies to enhance collections. Current year collections have averaged approximately 68% in recent years, which is well below comparable US jurisdictions. Low compliance rates and thousands of properties in Puerto Rico that do not appear on the property tax rolls affect the revenue productivity and fairness of the property tax system. CRIM has the responsibility for virtually every aspect of property tax administration, including developing a cadastral survey, identifying taxable parcels, developing and maintaining an appraisal manual, developing tax records, calculating the valuation for all real property, notifying taxpayers of their respective obligations, and collecting the real and personal property tax. Although CRIM currently delegates services to select municipalities via collaboration agreements for functions such as appraisals, collections, verifications, and investigations, municipal governments still have limited roles in the administration of the property tax. Thus, enhancing the effectiveness of CRIM is critical for municipal revenues and services.

18.1.1 Act 29-2019

On April 15, 2020, the Title III court issued a decision granting summary judgment to the Oversight Board on several of its claims against the Governor and AAFAF and nullifying Act 29-2019 as being in violation of PROMESA. The Title III court's order became effective on May 7, 2020. The effect of this nullification requires municipalities to cover their own employees' healthcare and PayGo costs. For FY2020, the PayGo and healthcare obligations are approximately \$166 million and \$32 million, respectively. The Oversight Board, the Government, and CRIM have agreed that the combined amount due, \$198 million, will be partially offset by the FY2020 Commonwealth transfer of \$132 million (that was transferred to CRIM in accordance with the 2019 Fiscal Plan and certified Budget). Under Act 29-2019, CRIM was retaining these funds, but remitted approximately \$34 million to municipalities in lieu of property taxes as part of the monthly remittances. This was in violation of the 2019 Fiscal Plan and certified Budget, and the Commonwealth will recover these funds through the short-term liquidity facility described in Section 18.2.3. Therefore, CRIM must return the retained funds to the Commonwealth to be applied as a set-off against these obligations due. After accounting for the various transfers of funds, the nullification of Act 29-2019 results in the municipalities currently owing \$66 million to the Commonwealth for their employees' FY2020 PayGo and healthcare contributions. This amount equates to approximately 3% of the total municipality General Fund budgets in FY2020 (~\$2 billion), although the impact varies on a municipality-by-municipality basis.

The Oversight Board accepted CRIM's proposal to allocate the \$132 million in equal proportion across municipalities. Under this option, every municipality will owe ~33% (representing \$66 million of the \$198 million total amount due) of its FY2020 PayGo and ASES obligations. These amounts will be repaid according to the repayment waterfall in Exhibit 118. This repayment waterfall focuses on incremental revenues that municipalities

have not considered in their FY2020 budgets. Therefore, the financial impact on municipalities should be minimized.

EXHIBIT 118: REPAYMENT WATERFALL

Repayment waterfall	Description
Step 1 – Offset outstanding obligation against electronic lottery funds true up	 CRIM identified \$17.6 million of Electronic Lattery proceeds from FY2016 & FY2017 previously not remitted to CRIM as required by Law Use these funds to offset a portion of the remaining obligation of \$66 million
Step 2 - Offset outstanding obligation against excess CAE rebate	 If tax collections exceed the amount needed to cover annual debt service on CAE loans, municipalities receive this excess at the end of the year Use these funds to further offset remaining obligations after Step 1
Step 3 - Offset outstanding obligation against the final FY20 liquidation	 CRIM projects annual municipal advances at the beginning of each fiscal year and remits funds based on projections monthly After the fiscal year ends, CRIM reconciles actual collections to remittances and liquidates any excess to the corresponding municipality Use these funds to further offset remaining obligations after Steps 1 and 2
Step 4 - Offset outstanding obligation against the collection of aged Accounts Receivable	 CRIM will value and plan to monetize its portfolio of accounts receivable by the end of FY2021. This action is projected to result in up to \$400 million in proceeds. Proceeds from the sale of this portfolio shall be paid to the Commonwealth to further offset remaining obligations after Steps 1, 2 and 3.
Step 5 - Offset outstanding obligation against municipal advances	 If FY2020 PayGo and health care obligations are not fully repaid after Steps 1, 2, 3 and 4, CRIM should offset the municipality's monthly advances until the remaining obligation is repaid in full. To minimize the impact of offsets. CRIM must undertake revenue enhancing measures to secure additional revenues that could then offset the remaining liability due. If CRIM does not achieve its revenue-enhancing measures by the end of FY2022, a series of collection measures will be enacted. These measures include the establishment of a lockbox mechanism to control all cash receipts and disbursements and an immediate offset of 25% of the outstanding obligation from property tax advances. These offsets will continue in varying amounts until the obligation is fully repaid. If the balance of the FY2020 health care and PayGo obligations is not paid down by the end of FY2022, the budgeted monthly Commonwealth transfer will be placed on hold until such time as the requirement is met.

18.2 Disaster recovery and the COVID-19 crisis

18.2.1 Accelerating post-disaster recovery at municipalities

Puerto Rico has experienced historic and unprecedented disasters since 2017. The impact of Hurricanes Irma and Maria, as well as a magnitude 6.4 earthquake on January 7, 2020 (and the subsequent aftershocks), resulted in significant damage to the infrastructure and economy, and prompted material out-migration. The Federal Government has supported post-hurricane reconstruction in the municipalities primarily through FEMA's Permanent Work (Categories C-G) Small Projects and Community Disaster Loans (CDLs). Small Projects are defined as those with total project costs of up to \$123,100 for Permanent Work Categories C-G. As of May 18, 2020, 1,224 projects have been obligated to municipalities, totaling ~\$48.9 million, of which ~\$33.5 million has been disbursed. In addition, 3,285 Small Projects are currently in the project formulation stage, with a total approximate cost of \$152 million. CDLs are provided to municipalities that have suffered a substantial loss of revenues as a result of a disaster and that can demonstrate a need for federal financial assistance to perform critical functions such as payroll, supplies, and maintenance materials related to disaster operations. 76 of the 78 municipalities have received nearly \$300 million from the Federal Government to make up for lost revenues due to the Hurricanes in the form of CDLs. Municipalities and the people of Puerto Rico have also received disaster funding through Individual Assistance programs, Small Business Administration Loans, Department of Housing CDBG-DR programs, and Department of Transportation funding.

On December 7, 2019, the Oversight Board approved the Government's request to establish a "State Recovery Fund" that would fund advances to eligible Small Projects under the FEMA

Public Assistance program, which many municipalities required due to a lack of liquidity.²⁷⁴ The State Recovery Fund was financed solely from a reprogramming of the \$100 million FY2020 certified budget appropriation under the custody of OMB designated as "Cost share of public assistance" and is to be used only for Small Projects (as defined above). The Oversight Board also included several requirements from the Government as a precondition to approval of this State Recovery Fund. Since the establishment of this State Recovery Fund, COR3 has informed the Oversight Board that \$92.5 million would be returned to OMB given other mechanisms have been put in place to expedite Small Projects and the funds are no longer required by the municipalities.²⁷⁵

The 2020 Fiscal Plan includes the use of \$9 million requested for the first required steps of demolition and debris removal as a result of the earthquakes in Guayanilla, Guánica, and, Peñuelas, which are a prerequisite for redevelopment of the southwest region. As a next step, the Oversight Board urged the Government to determine what incremental efforts of this type are necessary in other municipalities (e.g. Ponce and Yauco) that have suffered from the earthquakes, and that these incremental requests be submitted for Oversight Board approval as soon as possible.

Beyond the first steps of demolition and debris removal, the next step should be the development of an integrated and comprehensive plan for the long-term economic reconstruction of the southwest region, focusing on rebuilding with resiliency and taking into account the changes in the economy in a post-COVID world, the patterns of migration from the area, and the potentially-permanent risks to populations from the earthquakes and erosion after the hurricane, among other factors. This plan should be developed in coordination with FEMA and other relevant agencies.

18.2.2 COVID-19 crisis

In response to the COVID-19 crisis, the 2020 Fiscal Plan provides for a one-year pause in the further reduction of Commonwealth appropriations to municipalities; accordingly, the FY2021 appropriation will remain at \$132 million (i.e., the same as in FY2020) rather than decline by \$44 million as defined in the 2019 Fiscal Plan. This additional financial support for municipalities should be used to effectively implement strategies that will allow municipalities to improve their financial sustainability by instituting critical changes in operating structure, sharing costs through consolidated services, and improving revenue collection.

In addition, the Governor signed an executive order that adopts the "Strategic Plan for Disbursement" of the \$2.2 billion allocated to Puerto Rico by the Coronavirus Relief Fund created by the Federal Government through the CARES Act, which assigns \$100 million to be transferred to the municipalities for eligible expenses related to COVID-19.

18.2.3 Liquidity Facility

The onset of the COVID-19 pandemic resulted in the deferral of the personal property tax return due date as an emergency measure enacted by the Government. This extension has created a short-term liquidity challenge for CRIM and the municipalities for the remainder of FY2020 (May and June) and the first month of FY2021 (July). The Oversight Board approved a short-term liquidity facility of up to \$185 million, funded by the Commonwealth, to ensure that CRIM can continue to advance monthly tax remittances to municipalities, which are crucial for municipal operations. This authorization will be in effect through July 31, 2020.

The use of the liquidity facility is dependent on an approved budget that incorporates monthly municipal net remittances, payment of certain statutory and contractual debts, and CRIM

²⁷⁴ Oversight Board letters dated December 7 and December 14, 2019.

²⁷⁵ COR3 letter to the Oversight Board dated April 14, 2020.

operations. Repayment of the loan will come from basic property tax revenues received by CRIM, with receipts expected in August, September, and October 2020. This liquidity facility shall be repaid in full on or before November 30, 2020. The creation of a lockbox account will be required to protect the Commonwealth's collateral. In addition, CRIM will be required to provide both weekly and monthly financial reports regarding tax collection activity and financial statements, including income statements, balance sheets, and cash flow statements.

18.3 Vision and reform needed to transform municipal services

Given the lack of meaningful progress to date in achieving municipal government services reform and municipalities' financial challenges, particularly in the context of the Hurricanes, earthquakes, and COVID-19, the Government will need to develop a solution to streamline and consolidate municipal services throughout Puerto Rico. Otherwise, the Government faces the prospect of expanding municipal operating deficits, further deteriorating infrastructure, and worsening service delivery.

Since municipalities provide services that are, in most cases, complementary to those of the Government, the Commonwealth should take this opportunity to rethink the entire governmental structure, not just that of municipal governments. This will allow the Government to deliver better services across agencies in coordination with municipalities, and to do so more cost-effectively. A centralized approach has proven, repeatedly, to be inadequate for the management of various government programs in Puerto Rico. A new decentralized model could remove the bottleneck of centralized Commonwealth agencies, dramatically increasing capacity to respond to a crisis and improving service delivery at a local level. Unfortunately, the vast majority of municipalities do not (individually) have the administrative or financial capacity to operate Commonwealth programs. Many also lack the economies of scale necessary to be efficient with programs such as ASUME, ADFAN, or Vivienda. However, a consolidated municipal service structure could enable the delegation of certain Commonwealth responsibilities to local governments. Such a model could yield municipal and Commonwealth savings, and a portion of those savings could be reinvested back into the municipalities where savings are realized.

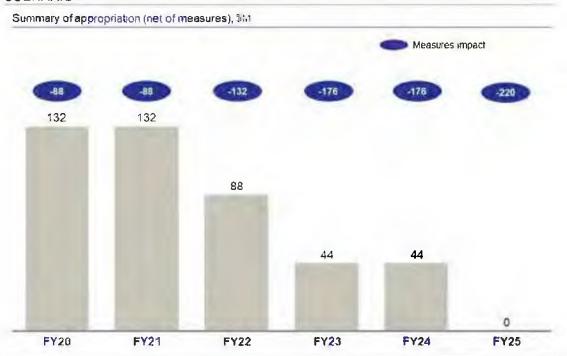
In addition, a more integrated government structure could help implement locally-based economic development strategies, which are more viable at a regional level than on an individual municipality basis. On the revenue side, service consolidation could further enhance the coordination of property tax collection by standardizing and automating processes and integrating data and information systems.

18.3.1 Incentivizing consolidation of services

To further incentivize service consolidation, the 2020 Fiscal Plan lays out a set of voluntary options for municipalities to consider. By consolidating services, municipalities will be able to significantly reduce costs. Under this approach, municipalities that voluntarily choose to consolidate services will be eligible to receive a one-time financial incentive upon certification of such action by the Oversight Board. To fund this initiative, the 2020 Fiscal Plan sets aside \$22 million in each fiscal year through FY2025 for distribution among municipalities that complete service consolidations, as confirmed by the Oversight Board. The amount distributed will be determined in coordination between AAFAF and the Oversight Board and will depend on the size of the municipality and the scale of service consolidation. The 2020 Fiscal Plan otherwise maintains the overall approach of phasing-out the entirety of municipal appropriations, which will reach zero by FY2025.

Exhibit 119 illustrates the reduction in municipal appropriations that would occur if voluntary consolidation of services is not pursued and the status quo is maintained.

EXHIBIT 119: REDUCTION IN MUNICIPAL APPROPRIATIONS UNDER STATUS QUO SCENARIO



18.3.2 Oversight Board's municipalities pilot program

On May 9, 2019, the Oversight Board announced that all 78 municipalities would become covered instrumentalities under PROMESA, with the aim of securing their long-term fiscal viability. As part of the initiative, the Oversight Board selected 10 geographically-aligned municipalities for a pilot program to develop fiscal plans and budgets to be reviewed and certified by the Oversight Board.

The ten municipalities selected from the central and northern regions are Orocovis, Aibonito, Barranquitas, Cidra, Comerio, Villalba, Camuy, Isabela, Quebradillas, and San Sebastián. Each municipality is required to include spending reduction and efficiency measures in their fiscal plans. These measures may include inter-municipal shared services arrangements, programs to improve and optimize local revenue collection, economic development guidelines, and decentralization proposals, and the Oversight Board has offered technical assistance in this process. The pilot program will show the value of consolidating services in seeking to reduce expenses and achieve long-term fiscal viability.

EXHIBIT 120: MAP OF MUNICIPALITIES PARTICIPATING IN THE OVERSIGHT BOARD'S PILOT PROGRAM



18.3.3 Property tax reform

CRIM plays an important role in supporting Puerto Rico's municipalities in their economic and social development by ensuring an efficient process to collect and distribute real and personal property tax revenues, which are an important revenue stream for municipalities. In FY2020, property taxes represented approximately 29% of the aggregate general fund budget for municipalities.

Historically, the taxable value of real and personal property has been significantly reduced by tax exemptions and exonerations. In FY2019 for example, more than 50% of the real and personal property tax base was eliminated through these exemptions and exonerations. In addition, there is a backlog of real properties not yet appraised, and collection rates for current year real property tax billings are well below comparable jurisdictions at approximately 68%. This has resulted in a large accounts receivable balance. Therefore, it is essential that CRIM seize all opportunities to maximize property tax collections to improve municipal revenues.

In partnership with the municipalities, CRIM must implement measures to capture unrealized property tax revenues by increasing tax compliance and improving overall collection rates. CRIM must also update the tax roll to include the tens of thousands of non-registered properties and home improvements. Additionally, CRIM must undergo an operational transformation centered around the replacement of outdated and inefficient applications and hardware and the establishment of a data-driven culture. Based on implementation planning discussions with CRIM management, CRIM estimates these initiatives could produce:

- \$70 million of additional annual revenue from raising real property tax compliance from 68% to 76%;
- \$118 million of additional annual revenue from registering properties and home improvements not on the tax roll;
- \$400 million of one-time revenue from selling the accounts receivable portfolio; and

Additional revenue-enhancing measures are identified in CRIM's Fiscal Plan.

Chapter 19. Pension reform

19.1 Current state of and required changes to pension reform

The Government operates three public employee retirement systems in Puerto Rico: The Employees' Retirement System (ERS), the Teachers' Retirement System (TRS), and the Judiciary Retirement System (JRS). The systems have different tiers of benefit formulas, some of which are traditional defined benefit pensions based upon years of service and final salary, while others are hybrid cash balance plans. Under the hybrid cash balance plans, employees have notional accounts credited with contributions and interest, and upon retirement, benefits are payable as an annuity. Different benefit tiers apply to employees based upon the year in which they were hired. Per the latest data available, each of the systems included the following liabilities: ²⁷⁶

- ERS: 242,000 total covered (119,000 active employees, 123,000 retirees and other beneficiaries); with \$1.5 billion in annual benefits and \$31 billion in total actuarial liability²⁷⁷
- TRS: 79,000 total covered (35,000 active employees, 44,000 retirees and other beneficiaries); with \$0.7 billion in annual benefits and \$17 billion in total actuarial liability
- JRS: 878 total covered (364 active employees, 514 retirees and other beneficiaries); with \$25 million in annual benefits and \$0.7 billion in total actuarial liability

All employees have historically made contributions toward their benefits, albeit at different rates. Most regular government employees (including police officers as of January 1, 2020) also participate in Social Security, which includes both employer and employee contributions; most teachers and judges do not participate.

²⁷⁶ All liability estimates are as of July 1, 2017, and benefit estimates are for FY2018, but based on census data as of July 1, 2016

²⁷⁷ Coverage counts do not include participants who are terminated and owed a deferred vested benefit as this participant data is unavailable. The liability for these participants is estimated via a load in the actuarial liability.

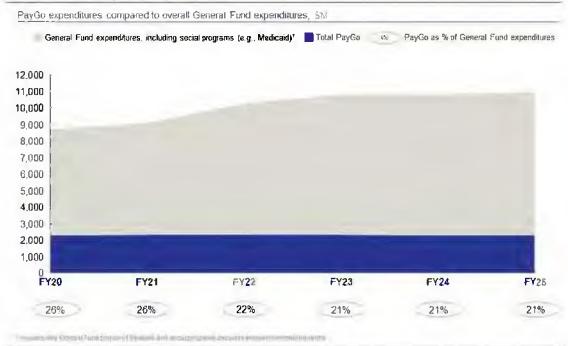
EXHIBIT 121: PUBLIC EMPLOYEE RETIREMENT SYSTEMS OVERVIEW (PRIOR TO PLAN OF ADJUSTMENT)

Group	Defined Benefit Hybrid Cash 8a up Component Component		Defined Contribution Component	Social Security Coverage
ERS - Hired Jan 1, 2000 or later	None	Based on employee contributions and a share of investment earnings prior to July 1, 2017	contributions and a share contributions if investment earnings beginning July 1	
ERS - Hired before 2000	Based on years of service and salary, frozen as of June 30, 2013	Based on employee contributions and a share of investment earnings from June 30, 2013 to July 1, 2017	Based on employee contributions beginning July 1, 2017	Police — Yes¹ Others — Yes
TRS - Hired Aug 1, 2014 or later	None	None	Based on employee contributions	No
TRS - Hired before Aug 1, 2014	Based on salary and years of service	None	None	No
JRS - Hired Jul 1 2014 or later	Reduced formula based on salary and years of service	Based on employee contributions and a share of investment earnings	None	No
JRS — Hired before Jul 1, 2014	Based on salary and years of service	None	None	No
Centers of Severe years organized in S	locial Security effective as of January (787		

Over many decades, successive governments have failed to adequately fund these retirement plans, and today the ERS, TRS, and JRS are nearly insolvent. In fact, Commonwealth PayGo expenditures to provide pension benefits are expected to continue constituting over 1/5 of General Fund expenditures without further action, as detailed below (Exhibit 122). In accordance with Section 211 of PROMESA, the Oversight Board published a detailed report in September 2019 on the Commonwealth's retirement systems. This report provides a comprehensive analysis of the retirement systems' legal structure, operations, and benefit provisions, as well as additional detail related to the history of management of these funds and actions by the Commonwealth that led to the insolvency of these plans. Moreover, it clearly illustrates the systems' critical underfunding and urgent need for reform.

²⁷⁸ Available via the following link: https://drive.google.com/file/d/1eJGQ-gRaSci1T_(xTqHzjLoRxE_xEkX1/view

EXHIBIT 122: PAYGO EXPENDITURES COMPARED TO OVERALL GENERAL FUND EXPENDITURES, PRE-MEASURES



These retirement plans have depleted the assets that were set aside to pay benefits. Further, the employer contributions were not transferred as anticipated.²⁷⁹ Satisfying pension commitments to current retirees and future retirees and their families is not only important to these individuals but also important to Puerto Rico's economy as retirees spend virtually all their income on the Island. Action must be taken to identify a level of benefits that Puerto Rico can afford and devise a plan for the Government to fund these revised benefits.

The Commonwealth has already taken critical steps toward a more stable pension system. Benefits for System 2000 ERS employees hired after January 1, 2000 were transitioned to a hybrid cash balance design with a benefit level based solely on the level of employee contributions. Subsequently, various legislation passed from 2013 through 2017 ceased accruals under the unsustainable ERS and TRS defined benefit (DB) plans (though TRS reform was subsequently partially overturned). As part of this reform, benefits for all ERS employees and for TRS employees hired after August 1, 2014 were transitioned to a hybrid cash balance plan design. With Act 106-2017, the Commonwealth transitioned to a new PayGo pension system, liquidated assets to help fund benefits owed, and has moved the assets of recently hired TRS members (and future contributions of ERS members) into segregated accounts. Hybrid accounts of System 2000 members were not similarly moved into segregated accounts. The Commonwealth is still in the development stage of implementing true defined contribution (DC) retirement plans for these members who previously had hybrid cash balance accounts, but this process has experienced significant delays. There is a need for further action to ensure the long-term adequate funding of pension benefits; in addition, some of the current commitments have not yet been fulfilled (e.g., the transition to the new defined contribution system has not yet been completed).

²⁷⁹ Legislative attempts to increase employer contributions to the pension trust were passed, including the Additional Uniform Contribution payments for ERS (Act 32-2013) and the Annual Additional Contribution for TRS and JRS (Act 160-2013 and Act 162-2013), however, large portions went unpaid and/or were not fully implemented prior to elimination by Act 106-2017.

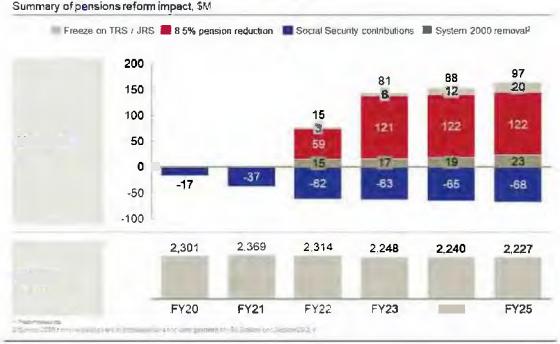
Puerto Rico's retirement systems must be further reformed to reduce costs and maintain adequate funding for current and future retirees. The measures included herein will have an average annual impact of approximately \$89 million through FY2025, once fully implemented by the start of FY2023. Reductions to benefits have also been structured to **protect lower-income retirees**, who otherwise could become impoverished and therefore be forced to rely upon government "safety net" benefits.

Only with pension reform can the Government help restore both fiscal balance and the promise for current and future retirees to safeguard their assets and their future pensions.

19.2 Proposed pension reform initiatives

Based on the measures herein, restructuring the pension system will lead to \$227 million in savings from FY2020 to FY2025, as shown below (Exhibit 123).

EXHIBIT 123: PENSION REFORM SUMMARY OF IMPACT



19.2.1 Freeze DB accumulation for JRS/TRS and enroll employees in a DC plan with segregated accounts

TRS members hired prior to August 1, 2014 and all JRS members are currently accruing benefits under the defined benefit components of their retirement plans. ERS members and TRS members hired after August 1, 2014 have already transitioned to hybrid cash balance plans. TRS members hired after August 1, 2014 have subsequently had their hybrid accounts segregated from the DB plan by Act 106-2017. These segregated balances, along with ERS contributions made after June 30, 2017, are being transitioned to DC accounts with a targeted completion date of July 2020.²⁸⁰ To avoid creating future pension liabilities and to adequately fund the pensions of both taxpayers and future retirees, the JRS and

²⁸⁰ Estimate provided by the Retirement Board in May 2020, however, the Retirement Board indicates that the delay may be further extended due to COVID-19.

remaining TRS benefit accruals must be frozen by July 1, 2021. Members will retain the benefits they have accrued to date, subject to the benefit reduction discussed below. Future benefits must be based on contributions and earnings in new defined contribution retirement accounts. This will result in consistent and equitable treatment across ERS, TRS, and JRS, where all employees will contribute to segregated DC accounts. Going forward, employees should have certainty that their contributions and investment returns will be safeguarded for the future through managing their own segregated accounts.

Although in the early years the DB freeze savings are small (~\$3 million in FY2022), over time, the freeze should produce significant savings (growing to over \$300 million per year by FY2041) which will play a significant role in restoring long-term adequate funding. The freeze will be implemented through the Plan of Adjustment (see *Chapter 21*) and is slated to take effect at the beginning of FY2022 so that needed changes can be implemented.

The 2020 Fiscal Plan reflects freeze provisions that are comparable to the ERS freeze that was implemented in 2013, with the following key aspects:

- Participants eligible to retire at the freeze date retain eligibility to retire at any time based on the benefit that has accrued through the freeze date. Otherwise:
 - Individuals that have yet to vest in a benefit amount will be allowed the opportunity to
 earn additional service towards vesting after the freeze; the benefit upon vesting will be
 calculated based on service as of the freeze date, with prorations of the full 10-year
 benefit based on years of service less than 10 years for judges with shorter tenures;
 - Certain judges within six months of service as of the freeze of reaching 30-year enhanced service benefits will be granted six months to grow into a modified enhanced 30-year benefit;
 - Normal retirement eligibility will be delayed up to three years for those not yet eligible for retirement as of the freeze date;
- Future Cost of Living Adjustments (COLAs) will be eliminated;
- Minimum benefits and bonuses will be eliminated for future retirements;
- The ability to purchase additional years of service will be eliminated; and
- Future terminations due to disability will be entitled to the same benefits as regular terminations.

19.2.2 8.5% pension benefit reduction

Notwithstanding the reduction in expenditures throughout the Commonwealth's budget, contractual debt service remains unaffordable. Retirement plan participants, like other unsecured claimholders, therefore face a reduction of up to 8.5% in the amounts paid to them by the Commonwealth.²⁸¹ A reduction in pensions (with protections for participants close to the poverty level) is appropriate and necessary for the Commonwealth to achieve long-term fiscal stability. The goal is a balanced approach to restore fiscal health to Puerto Rico while ensuring that cuts to retirement benefits occur in a manner that protects any retirees from falling into poverty. The proposed reduction, while significantly

²⁸¹ As per the terms of the Plan Support Agreement reached between the Oversight Board and Retiree Committee on June 7, 2019. In comparison, the 2019 Fiscal Plan included a reduction that was expressed as a marginal reduction to benefits above a threshold that varied by position and was indexed, resulting in a 10% average reduction in monthly pension benefits (including medical insurance bonuses). The revised formulation is a simplified 8.5% flat reduction to the monthly pension benefits (excluding medical insurance bonuses) that is limited by a single \$1,200 per month threshold, below which benefits are not reduced.

smaller as a percentage reduction than those faced by other unsecured claims, including GO bondholder claims and General Unsecured Claims, will still represent a significant reduction in retirement income for many retirees. This treatment is similar to the level of reduction in pension benefits relative to reductions faced by other creditors that has been seen with other government systems facing pension funding crises.²⁸²

Although the benefit reduction will be 8.5%, this reduction will not apply to those with monthly pension benefits of less than \$1,200 per month and will not reduce anyone's monthly benefits below such level.²⁸³ Exhibit 124 illustrates the current distribution of participants by monthly benefit amount across the Commonwealth's retirement systems.

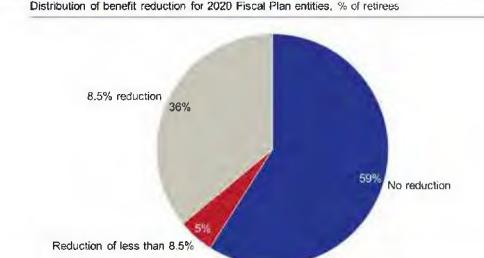
EXHIBIT 124: DISTRIBUTION OF BENEFIT AMOUNTS BY RETIREMENT SYSTEM284

	ERS		TRS		JRS		
Monthly benefit amount	Number of pensioners	% of total pensioners	Number of pensioners	% of total pensioners	Number of pensioners	% of total pensioners	
Up to \$1,000	71,065	59.6%	12,634	27 6%	37	6.9%	
\$1,000 - \$1,200	9,539	8.0%	3,932	8.6%	8	1.5%	
\$1,200 - \$1,500	12,545	10.5%	8,728	191%	23	4.3%	
\$1,500 - \$2,000	12,815	10.7%	7,648	16.7%	34	6.4%	
\$2,000 - \$3,000	9,509	8.0%	12,436	27.2%	51	9.6%	
Over \$3,000	3,778	3.2%	322	0.7%	380	71.3%	

Under this approach, about 59% of retirees would receive no reduction in their benefits and no retiree will experience a benefit reduction of more than 8.5% (Exhibit 125).

This formula will also apply to benefits earned by current employees who have yet to retire.

EXHIBIT 125: DISTRIBUTION OF BENEFIT REDUCTION



²⁸² For example, in Detroit and Rhode Island, pension cuts ranged from 0-30% across beneficiary categories 283 The reduction formula is determined as follows:

Calculate the average monthly pension by adding the regular monthly pension amount, the special law pension, and 1/12
of the Christmas, Summer, and Medicine Bonus payments

Reduce these monthly benefits by 8.5%

[·] Reductions are limited such that the total benefit level (as defined above) is not reduced below \$1,200 per month

²⁸⁴ Based on preliminary information provided by the retirement systems as of July 1, 2019 for participants in payment status as of that date. Information has not been reconciled with prior system and actuarial data.

The 2020 Fiscal Plan assumes that this 8.5% reduction shall take effect on January 1, 2022.

19.2.3 Covering more government workers in Social Security

Currently, teachers and judges do not participate in Social Security. They do not pay into the program, nor does the Government make a Social Security contribution on their behalf. Unlike ERS members, teachers and judges are entirely reliant on their government pensions for income in retirement. This places them at risk given that government retirement plans are poorly funded. Effective January 1, 2020, police officers, who were similarly situated previously, began actively participating in Social Security.

These groups are exempt from Social Security because of the "Section 218" agreement between the Commonwealth and the Social Security Administration, which stipulates that certain government employees have wages that are includable for Social Security and subject to FICA taxes while others may be exempt from Social Security if they participate in a "qualified replacement plan." Section 218 of the Social Security law provides guidance as to what constitutes a "qualified retirement plan," such as a defined benefit plan with a minimum benefit level or a defined contribution plan in which total employee and employer contributions equal to at least 7.5% of employee wages. Teachers and judges are both in job classifications that, under the Section 218 agreement, are exempted if such a "qualified replacement plan" exists. Under the current TRS and JRS retirement plans, this requirement is met and, therefore, such employees are exempted from Social Security.

Covering these workers under Social Security will provide them with diversified sources of income in retirement, and Social Security's progressive benefit formula will provide a stronger safety net for lower-paid employees. Workers will typically earn greater retirement benefits under Social Security, based on a 6.2% employee contribution and a 6.2% employer (government) match, than they would in a DC plan funded only with a 6.2% contribution. For example, a typical full-career government employee retiring with a salary of \$35,000 will be entitled to a Social Security benefit of approximately \$16,000, in addition to the benefit the employee builds in their defined contribution retirement account.

Social Security retirement benefits are only provided for those who have ten years of covered earnings. Therefore, it would not be worthwhile for older workers, who may not meet the tenyear threshold and do not have other employment in which they were covered by Social Security, to be covered under Social Security. For this reason, only teachers and judges under the age of 45 shall be covered under Social Security. This can be accomplished without either an employee referendum or new federal legislation by freezing the TRS and JRS plans and reducing the defined contributions for current teachers and judges under the age of 45 and all future teachers and judges hired to an amount lower than the 7.5% required by Section 218. This step will trigger mandatory enrollment in Social Security. Concurrently, lowering the employee defined contribution for younger workers will address the loss of take-home pay they would suffer by having to contribute the 6.2% Social Security payroll tax. This approach is consistent with the approach used to implement Social Security participation for police officers in FY2020.

The 2020 Fiscal Plan includes the enrollment of teachers and judges under the age of 45 in Social Security as of July 1, 2021, coincident with the plan freeze discussed in *Section 19.2.1* above. At a further date, the Commonwealth may wish to take the necessary steps to provide the option for teachers and judges over the age of 45 to be covered under Social Security.

19.2.4 System 2000 settlement

Following the agreement with AFSCME documented in the AFSCME Plan Support Agreement, the Plan of Adjustment (see *Chapter 21*) includes specific treatment for certain ERS plan

participants known as System 2000 members. These are generally ERS members hired on or after January 1, 2000.

Beginning for employees that joined ERS on or after January 1, 2000, participants were enrolled in a hybrid cash balance plan design. The hybrid account balances were credited with the employee contributions made to the plan and interest that was connected to the overall ERS trust return. As a result of Act 106-2017, these accounts were frozen as of June 30, 2017 and no longer were credited with either employee contributions or interest.

For participants who have not yet retired, providing access to a market interest return can help the participant in achieving greater retirement benefits from these historical contributions. In lieu of receiving a future benefit from ERS, System 2000 participants will receive the value of their contributions and any interest accrued under the terms of the plan through the Commonwealth (approximately \$1.5 billion) petition date as a deposit into their Act 106-2017 accounts.

For ERS participants hired prior to January 1, 2000, benefits payable under Act 1 and Act 447 were frozen as of June 30, 2013 by Act 3-2013. As a result, from July 1, 2013 through June 30, 2017, these employees also accrued a hybrid account from employee contributions and interest associated with ERS trust returns. These benefits are annuitized and paid out along with the benefits calculated under Act 1 / Act 447. As this portion of the benefit is largely based on employee contributions, the benefit reduction described in *Section 19.2.2* will not be applied to the annuitized value of these hybrid accounts.

19.2.5 Other Plan of Adjustment provisions

The Plan of Adjustment (see *Chapter 21*) provides that an independent pension reserve trust will be established and funded to ensure that future PayGo benefits can be paid regardless of the future economic or political situation in the Commonwealth. Funding for the pension reserve trust is to be provided according to a formula based on the Commonwealth's annual surpluses.²⁸⁵

In order to ensure that retirees may benefit from the Commonwealth's outperformance of Fiscal Plan financial projections, the Plan of Adjustment also contemplates a mechanism whereby retirees subject to the aforementioned reduction in monthly pension benefits may see that reduction partially, or even fully, restored in cases where the Commonwealth materially exceeds the financial projections in the Fiscal Plan that is certified by the Oversight Board and is in effect as of the Effective Date of the Plan of Adjustment.²⁸⁶

Due to the contingent nature of these provisions, neither are included in the 2020 Fiscal Plan projections. For additional detail on these and all other Plan of Adjustment provisions, please refer to the published Plan of Adjustment, available on the Oversight Board website, as the authoritative source for information.²⁸⁷

19.3 Implementation and enforcement of pensions measures

Advance work will be necessary to prepare the systems for the JRS / TRS freeze and pensions reductions, as well as to ensure proper communications with all Puerto Rican pension recipients. The May 2019 Certified Fiscal Plan assumed the full implementation of pension

²⁸⁵ Please refer to Article LXV – Governance and Provisions Regarding Pension Reserve in the February 28, 2020 Amended Plan of Adjustment for additional detail.

²⁸⁶ Please refer to the definition of "Benefit Restoration" and Article XLIII - Provisions For Treatment Of Active And Retired Employee Retirement Benefit Claims (Class 39A Through 39E) in the February 28, 2020 Amended Plan of Adjustment for additional detail.

²⁸⁷ The Plan of Adjustment is available at https://drive.google.com/file/d/1DKAXIMyHpDUvya_UzGjEhyHTAuiuqcfJ/view

reform measures by July 1, 2020. Given implementation delays, the 2020 Fiscal Plan assumes that full implementation of pension reform measures will not occur until January 1, 2022.

19.3.1 Defined Contribution plan implementation

Effective July 1, 2017, Act 106-2017 was passed to commence the process of reforming the pension systems after years of mismanagement. Since then, the Oversight Board has been actively encouraging the Government to take further steps to reform the pension system.

Act 106 required implementation of a Defined Contribution plan that would cover all ERS participants and certain TRS participants (those hired on or after August 1, 2014). It also created the Retirement Board, which is charged with overseeing the implementation of these defined contribution accounts. The Defined Contribution plan comprises of individual retirement accounts funded with contributions that are automatically withheld from each employee's paycheck. The Defined Contribution plan impacts ~104,000 active government employees and provides not only a mechanism for employees to easily save for their retirement, but also an opportunity to grow these retirement savings based on either default or individually-selected investment options.

Shortly after Act 106 was enacted, the Oversight Board issued letters and statements that emphasized the need for quick and effective implementation of the Defined Contribution plan. However, implementation of the Defined Contribution plan has taken far longer than expected, due to both the disruptions caused by the natural disasters and the extensive administrative delays by the Retirement Board. Litigation over the failure to implement or develop the Defined Contribution plan began to unfold, led in many respects by significant unions such as AFSCME and AMPR. This litigation eventually led to AAFAF pledging that Defined Contribution plan accounts would open no later than 2019. Yet, nearly three years after enacting Act 106, implementation of the Defined Contribution plan remains incomplete.

The Oversight Board has repeatedly been advised by the Government that Defined Contribution accounts would be fully implemented in short order, with the balances transferred to the management of individual employees. Though this has still yet to come to fruition, the Oversight Board had recently been given assurances that phase 2 of implementation, including the funding of individual accounts invested at the participant's direction, would be completed by the end of FY 2020. However, in light of the COVID-19 pandemic, the Oversight Board has subsequently been notified that further delays are now possible.

Section 201(b)(1) of PROMESA requires the fiscal plan to provide a method to achieve fiscal responsibility. This includes the responsibility of ensuring that the retirement programs that the Commonwealth provides to its employees are sufficient to provide adequate retirement income and minimize the economic dependence of these employees on the Commonwealth in the future. This is further emphasized by Section 201(b)(1)(C) which requires adequate funding for public pension systems.

PROMESA Section 201(b)(1)(A)(i) requires that fiscal plans be based on applicable laws. Act 106-2017, which outlines the objectives and provisions for these new Defined Contribution accounts, specifies in Section 4.2(f) that the Defined Contribution plan should follow the rules under the Employee Retirement Income Security Act of 1974 ("ERISA"), which contains standards regarding the rights of Participants and the responsibilities of administrators. ²⁸⁸ ERISA defines various fiduciary responsibilities, including Section 404(a) of ERISA which defines standards for a "Prudent man standard of care". As further defined in Subsection

Act 106-2017 Section 4.2(f) states: "To establish, implement, and oversee the best practices related to discretion, loyalty, diligence, and the rules applicable to the New Defined Contribution Plan regarding the operation thereof, the rights of Participants, the responsibilities of administrators, fiduciary duties, and any other rules applicable under the "Employee Retirement Income Security Act," Public Law 93-406, of September 2, 1974, or any other pertinent or similar statute."

(a)(1)(B), ERISA requires plan fiduciaries, including plans sponsors, to act "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."

It has been almost three years since Act 106-2017 introduced Defined Contribution accounts for most Commonwealth employees. In the meantime, employee contributions to the Defined Contribution accounts are being held in a temporary trust with only nominal interest accruals. Only by full funding of individual accounts will the participants have access to the market returns implicitly promised by the Government. The Oversight Board feels that the failed timely implementation of the individual DC accounts is not compliant with fiduciary responsibilities under ERISA.

Current and future public sector workers need to have confidence that the funds being invested toward their retirement are being treated with the appropriate level of care and afforded the opportunity to grow over time. It is precisely because the Government has no financial obligation for these retirement benefits, that the Government must honor its fiduciary obligation for implementing the Act 106 plan and transferring employee contribution in a timely manner.

During this implementation delay, the Oversight Board has repeatedly identified instances where the Government has failed to ensure employee withholdings are transferred immediately to the temporary trust where account balances are being held.

- On April 30, 2019 the Oversight Board notified the Commonwealth that it had identified agencies that had withheld employee contributions intended for participant DC accounts but had failed to transfer these dollars to the Retirement System. The total Individual Contribution debts included \$2.6 million on behalf of public corporations and \$7 million on behalf of municipalities. The Oversight Board referred these matters to Commonwealth and federal authorities, and all outstanding balances have since been collected.
- On February 21, 2020, the Oversight Board once again outlined Individual Contribution debt owed by various agencies. Approximately \$20 million was identified that was owed for Individual Contributions made to the DB plan (prior to July 1, 2017) and an additional \$2 million in contributions intended for participant DC accounts. Though the Oversight Board once again referred matters to the Department of Justice, there remains \$20 million outstanding due to public corporations' lack of liquidity. These debts and the liquidity position of public corporations continue to be monitored, and the Oversight Board will continue taking necessary action to ensure that accumulation of additional debt for Individual Contributions is avoided.

The Oversight Board urges the Government of Puerto Rico to instruct agencies, municipalities, public corporations, and those entities that manage government payroll to deduct and immediately address the transfer of these individual contributions. A failure to honor this fiduciary obligation increases the risk of insufficiency in retirement income, the potential futility of the benefit offering, and the diminishing viability of employment in the public sector.

The Oversight Board has been actively monitoring the progress of the Retirement Board in completing the implementation. While the primary focus has been on the timing of implementation, other issues have arisen that the Oversight Board has addressed. A list of letters (including the two concerning employee withholdings) from the past year related to Defined Contribution Plan implementation is contained in *Exhibit 126*.

EXHIBIT 126: SUMMARY OF LETTERS SENT BY THE OVERSIGHT BOARD REGARDING DC IMPLEMENTATION

Letter	Description	Date
Individual Contributions Withholdings	Oversight Board highlights the lack of compliance with Act 106 regarding individual contributions withholdings on behalf of Government	April 30, 2019
Act 106 – Default Investment Option	Pursuant Section 205 of PROMESA, Oversight Board provides recommendation to Government on legislative intervention to amend Act 106 in order to define the default investment option as a target date life-cycle fund, rather than a principal preservation fund	January 11, 2020
Individual Contributions Withholdings	Oversight Board highlights the continued lack of compliance with Act 106 regarding individual contributions withholdings on behalf of Government	February 21, 2020
DC Implementation Delay Contributions Withholdings	Oversight Board expresses concern with constant changes and delay in due dates	February 27, 2020
Act 106 Policy	Response to Government declining recommendations in Section 205 letter previously sent on behalf of Oversight Board regarding DC implementation delay	April 27, 2020

Once the transition to the Defined Contribution plans is complete, employees will depend on the ability of these accounts to produce retirement income. To this end, the Oversight Board believes that the default investment option offered by the Defined Contribution Plan should encourage participants to adequately invest their accounts to generate retirement stability. The current default option of the principal preservation fund is inadequate for this task, and as such the Oversight Board feels it is important to change the default investment option to the target date life-cycle fund. This vehicle produces significantly higher long term returns by providing access to higher returning investments during the period of participants' lives when they are better able to handle the risk. While the Government has declined to take the Board's suggestion on this matter, the Oversight Board remains committed to promoting this change since the default option of a principal preservation fund, as currently provided under Act 106, is inadequate for retirement readiness.

The Oversight Board believes that the use of a principal protection fund as the default investment option is not compliant with fiduciary responsibilities under ERISA. The use of target date funds as an investment option, however, is largely supported by similar plans in both the private sector and is consistent with the investment vehicles used by many other governments.

PROMESA Section 201(b)(1)(F) requires the fiscal plan to improve fiscal governance, accountability, and internal controls. As part of proper governance and accountability, the fiscal plan requires the government to correct the fiduciary responsibility failure and correct the default payment option to a more appropriate option of a target date fund. While the principal protection fund was established as the default investment option by the same Act 106-2017 and perhaps seemed prudent at the time for existing Commonwealth employees and particularly participants close to retirement, data from the Retirement Board has since shown that over 80% of Commonwealth employees have maintained the default investment option. The Oversight Board feels that it is irresponsible to lead the younger plan participants to have their investments default to an investment option for their entire career that is meant for older

workers. Therefore, the Oversight Board believes that it is necessary to change the default investment option to target date funds which will automatically steer younger workers to invest in funds consistent with their extended retirement horizon and will automatically shift older workers to funds that are closer to retirement to the principle protection fund currently defined for all members.

As part of meeting its fiduciary responsibility, in selecting which target date funds to offer, the Commonwealth should select funds that have a demonstrated track record of appropriate management and achieving returns that are justified by their fees. This will provide Commonwealth employees with the tools they need to be adequately prepared for retirement.

19.3.2 PayGo Compliance

In addition to establishing the Defined Contribution Plan, the passage of Act 106-2017 established the Pay-as-you-Go ("PayGo") system. The PayGo system, under which pension benefits are paid out of the annual Commonwealth budget rather than via amounts previously set aside into pension trust funds, was implemented to ensure the continued payment of benefits to retirees given that the ERS, TRS, and JRS trust funds were effectively insolvent. Currently, PayGo obligations represent approximately 26% of General Fund expenditures.

Section 2.1(b) of Act 106-2017 establishes a PayGo Fee that is "equal to the amount paid to Retirees and Beneficiaries of each covered entity." The responsibility for entities to pay this Fee and the authority of the Office of Management and Budget to collect the fee is further outlined in the legislation. Section 2.1(f) authorizes the Office of Management and Budget to "withhold from the appropriations made to the agencies of the Government of Puerto Rico, the necessary amounts for the payment of the Pay-Go Fee, if it determines that such withholding is necessary to ensure that covered entities fulfill their obligation." Section 3.5(2) further subjects any entity who fails to remit the Fee to a series of corrective actions, including the following items all to be requested by the Retirement Board in writing:

- The immediate transfer of the Pay-Go fee or delinquent contribution
- The Secretary of Treasury to make adjustments to the "accounts, obligations, and advances that the Department of Treasury must remit to the delinquent employer"
- That the Municipal Revenue Collection Center, "CRIM", remits the Pay-Go fee or delinquent contribution of the "unencumbered balance of the property tax and other revenues that the Municipalities are entitled to receive."
- The Office of Management and Budget may withhold any form of appropriations to agencies necessary to meet the Pay-Go Fee obligation

The Oversight Board continuously monitors the status of entity compliance with paying the Pay-Go Fee. Exhibit 127 demonstrates the significant level of PayGo debt owed by Commonwealth Government Entities and Municipalities as of May 15, 2020.

Entity type	FY2018 debt	FY2019 debt	FY2020 debl1	Total
Municipality	132	82	-	214
Commonwealth government entities	49	30	44	123
Total	181	112	44	357

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There has been an effort to have delinquent agencies enter into payment plans to resolve historic PayGo debt. As of May 15, 2020, twenty-seven municipalities and public corporations have entered into repayment plans, with seven other active negotiations ongoing. Signed payment plans account for ~\$48 million of the \$337 million in outstanding debt.

The Oversight Board has further discussed with AAFAF possible remedies to further reduce the outstanding debt. AAFAF has the authority under Section 8(e) of Act 2 – 2017 to appoint a representative to oversee compliance with the execution of the Fiscal Plan, including compliance with the requirement that future and historic PayGo Fees be remitted in a timely fashion. Further, Section 8(b)(iv) of Act 2 – 2017 permits that when reports indicate an entity's cash flows are not consistent with the certified Budget, AAFAF may "direct and perform banking transactions on behalf of the appropriate entities of the Government of Puerto Rico to make debt service payments, among others." The Oversight Board and AAFAF have discussed actions including, but not limited to, withholding general fund revenues and/or debiting existing cash accounts to satisfy PayGo Fee debt.

Proper long-term health of the PayGo system requires constant compliance with and monitoring of the PayGo Fees as set forth in Act 106-2017. Failure to ensure these payments continue to be made would threaten the ability of the General Fund to sustain pension payments in the long-term and ultimately harm the welfare of Commonwealth retirees.

19.3.3 Social Security Working Group

The Oversight Board reached out to the Government on February 27, 2020 to convene an interagency working group (the "Social Security Working Group") to oversee the implementation of Social Security for teachers and judges. The expansion of access to Social Security for public workers has been a goal since the 2017 Fiscal Plan, and the Social Security Working Group has been created to prevent additional delays in ensuring that public employees are eligible for this benefit, particularly in light of past delays and challenges experienced as part of the implementation process.

On July 19, 2019, the Governor enacted legislation (Act 71-2019) to allow for the participation of police officers in Social Security. Multiple Fiscal Plans, including the 2019 Fiscal Plan, called for police officers to have access to Social Security no later than July 1, 2019. To provide adequate funding, the certified Commonwealth budgets also provided the appropriations needed for the Police Bureau to fund their Social Security contributions. Nevertheless, the implementation of Social Security for police was delayed by six months to January 1, 2020.

The Social Security Working Group will be addressing the lessons learned from the implementation of Social Security for police officers, payroll implementation, and optional participation election with the participation of members selected by the Government from

AAFAF, the Department of Education, the Retirement Board, the Department of the Treasury, and the Office of Court Administration, as well as representation from the teachers' union.

The Working Group has begun meeting, developing timelines, and assigning the tasks necessary to meet this goal, including educational materials for all teachers and judges. In connection with this, and at the Oversight Board's recommendation, the Social Security Working Group is also participating in implementation discussions related to the Defined Contribution plan so that all retirement related withholdings are coordinated. This is important in particular for police whose minimum Defined Contribution requirements have been reduced to 2.3%, with an additional 6.2% being withheld for Social Security FICA purposes. Based on the terms of their Section 218 agreement, police that want to maintain their eligibility for Social Security coverage cannot be allowed to contribute more than the 7.5% bar for a qualified replacement plan under Social Security law to their Defined Contribution accounts. Similar protocols will also need to be in place for teachers and judges that eventually are enrolled in Social Security.²⁸⁹

19.3.4 Municipality PayGo and Act 29

Act 29-2019 was passed by the Government to alleviate the municipalities from the responsibility for payment of their respective PayGo contributions (as established by Act 106-2017) and healthcare costs associated with ASES. The Oversight Board filed a complaint seeking to nullify the law. On April 15, 2020, the Title III Court granted the Oversight Board's motion for summary judgment and ruled that Act 29-2019 violated PROMESA and was nullified. The Title III Court delayed the effective date of its ruling through May 6, 2020, at the request of the Government, to give the Oversight Board and the Government an opportunity to discuss potential solutions for the impact of Act 29-2019 nullification. The Title III Court entered its order on May 7, 2020 and, as a result, Act 29-2019 is nullified and no longer in effect and the municipalities are expected to continue to be responsible for their respective PayGo and ASES contributions. A payment plan was put in place to extinguish the \$198 million FY2020 liability that does not affect operating budgets and enables repayment from incremental, unbudgeted revenues over a two-year period.

19.3.5 Required implementation actions

To achieve the 2020 Fiscal Plan pension reform measures, certain action items must be implemented according to the schedule described in *Exhibit 128*.

²⁸⁹ https://www.irs.gov/pub/irs-pdf/p963.pdf

Actionitem	Target date	FY2021 budget incentive
 Transition teachers hired after August 1, 2014 and ERS post-2017 contributions to segregated DC accounts 	• July 2020	 Provide an additional 20% to AAFAF professional services budget[†]
 Implement JRS / TRS freeze and transition to segregated DC accounts 	• July 2021	
 Enroll teachers and judges underage 45, as well as new hires, in Social Security 	• July 2021	
Implement 8.5% pension reduction	• January 2022	
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Chapter 20. Ensuring successful implementation and fiscal controls

As discussed in *Chapter 14*, the OCFO has broad responsibility for improving fiscal management as outlined in the 2020 Fiscal Plan. Below are specific details regarding the necessary implementation steps and reporting required by the 2020 Fiscal Plan.

20.1 Implementation architecture

Developing a centrally-run PMO is an important step toward ensuring the implementation and tracking of the core operational transformation and agency efficiency measures that will achieve savings targets under the 2020 Fiscal Plan. The OCFO should serve as the central PMO with defined reporting to the Governor of all economic and transformation measures. The PMO should be run by OCFO senior leadership, regularly coordinate across OMB and OARTH, work directly and frequently with Agency PMOs, and report directly into the Governor's office.

Individual Agency PMOs should be established with direct reporting to the OCFO PMO. Each agency head shall be responsible for developing and implementing a PMO structure that best fits their respective agency groupings. They are expected to coordinate across all agencies in their grouping, lead reforms for the grouping and be responsible for achieving their agency grouping savings targets. Through this PMO structure, the Government will be positioned to effectively manage and implement the 2020 Fiscal Plan. As such:

- Designated agency heads should lead the Agency PMOs and report directly to the OCFO
- Agency PMOs should undertake the required work to implement initiatives
- The daily activities of PMOs should be managed and undertaken by staff knowledgeable in the relevant subject matter areas, and assigned members meet regularly with PMO leadership to report on progress and facilitate necessary decision-making

 Agency PMOs shall be responsible for assembling a taskforce to: complete validation and definition of full scope of projects and priorities; finalize reporting tools and tracking responsibilities; and perform ongoing weekly tracking and reporting.

The PMOs should ensure continued implementation progress through robust tracking and reporting tools that foster growth in transparency and ownership, including:

- **Project charters** that establish the goals and structures of measures, identify risks and obstacles, and establish metrics and KPIs
- Implementation plans with detailed layouts of each activity required for accomplishing sub-measures, risks / mitigants for each activity, clear leaders and owners for each activity, and metrics and KPIs. These should include a "live" calendar of updates and status of each measure. If an activity goes behind schedule, the workplan will reflect that the activity is still in progress.
- Implementation dashboard / tracker that provides a single snapshot of the entire transformation plan; and allows management to know the status of each initiative in a distinct status: Complete; In Progress; Delays; Major Issues. This tracker will allow the Oversight Board to monitor progress and ensure enforcement of measures and reforms.
- **Sub-measure dashboards** that provide "zoomed in" views of a specific sub-measure, display progress with details / commentary on project status, include agreed upon milestones / dates to track progress, and provide mitigation plans
- Implementation monthly reports that provide a more detailed perspective on progress, including several key reporting elements: a) headcount by regular and transitory with more details in specific agency cases, b) budget to actuals by cost category and concept, c) milestones progress, d) KPIs/leading indicators, e) achieved savings to date. These reports provide important codification of progress as well as context for monthly meetings where agencies, OCFO and Oversight Board representatives can hold meaningful discussions on progress, items at risk and ongoing mitigating activities

20.2 Oversight Board and OCFO implementation collaboration

The Oversight Board has played, and will continue to play, an active role in overseeing all aspects of Fiscal Plan implementation. The OCFO must provide the Oversight Board and its staff the information needed to effectively track the status of key initiatives included in the 2020 Fiscal Plan, which is necessary to measure overall progress against the fiscal and budget objectives outlined therein.

For example, the OCFO will provide Oversight Board staff with key management artifacts on a timely basis, including:

- Implementation plans submitted by individual PMOs
- Progress reviews (including milestones and metrics) against key structural and fiscal measures
- Reviews of key implementation risks, including assessments of the likelihood of realization, potential impact, and potential mitigations
- Monthly progress reports submitted by individual PMOs

20.3 Reporting on Fiscal Plan reforms

The fiscal and structural reforms described in the 2020 Fiscal Plan represent a significant and transformative effort across the Government. As such, there are strict reporting requirements needed to ensure savings and growth targets are being achieved on time, and to identify any major risks to reform to course correct at an early stage.

To date, however, the Government has struggled with implementing reforms and reporting on this implementation in timely manner. Progress has, as a result, been inconsistent and incomplete, and many agencies appear unprepared to meet savings targets. While some progress on measures has been made, many reforms are delayed or not occurring. In cases where certain reforms will not occur, the Government must achieve these savings through other means.

The Government shall produce monthly performance reports, which shall be submitted to the Oversight Board on the 15th of each month, demonstrating the progress made on all key reform areas. Agency efficiency savings that have been realized should be broken down by grouping and agency across payroll and non-payroll savings (as well as on an object level where needed) and display the performance of the realized agency efficiency savings for each agency against the projections as set forth herein. Implementation reports should explicitly explain how budget-to-actuals reports tie to agency actions and reforms, and what is driving major discrepancies. Reporting shall also include detail on use of funds for professional services, as well as within the "englobadas" cost concept, such that these expenses can be appropriately managed. To date, less than 50% of agency groupings have consistently provided implementation reporting. The Government must improve reporting such that it and the Oversight Board can hold agencies accountable for achieving savings.

If, after any fiscal quarter the projected agency efficiency savings for any grouping is not realized, the shortfall from that fiscal quarter will be added to the agency efficiency savings target for the corresponding grouping for the following quarter. As needed, the Oversight Board will also hold public hearings to review implementation progress. Should there be underperformance in agency efficiency savings for any grouping, the Oversight Board may rely on its powers and rights pursuant to PROMESA to take measures to enforce reductions in the amount of unrealized savings.

20.4 Ensuring fiscal controls and transparency

Consistent with Chapter 14, the OCFO must improve fiscal governance, accountability, and internal controls over the Government's finances and budget. To ensure that there is transparency into the Government's progress toward meeting its savings targets, the Government is expected to meet the following milestones (Exhibit 129).

EXHIBIT 129: FISCAL CONTROLS AND REPORTING KEY IMPLEMENTATION MILESTONES

	Reporting Requirement	Closing of the fel Reporting Period	Cedence for FOMB Reporting *	Cudence for Public Reporting ^B	Requirements Source
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	2 Non-Germal Funds (Including Special Reserve Funds) ^{3, 5}	10010018	Monthly	Monthly (beginning 1/31/10)	Fracial Plan
	3 Pataral Funds	100 12019	Moretty	Monthly (beginning 1/31/18)	Fiscal Plin
	4 FCUs	10/31/2018	Monthly	Maniety purposering 1/31/10)	Fiscal Pla
	5 Comptroller Serate House of Representatives, Judiciary, Clid Rights Commission, CMBUDSWife	1001/2018	Monthly	Monthly (beginning 11/30/16)	Fried Pla
	8 Control Community Physiol and Hamman	10/31/2018	Monthly	Mantey	Frank Pa
	G FCU Payoli and Histothist ⁵	10/21/20:8	Monthly	Bl-sell'ry	Plent Pa
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In addition to meeting the above milestones, the Government must proceed according to the following budgetary requirements:

- The Department of the Treasury will remit to: the Legislative Branch and its components, the Judicial Branch, the University of Puerto Rico ("UPR"), and the non-profit entities that receive funds from the General Fund, monthly and in advance, the budgetary allotments corresponding to one-twelfth (1/12) of the budget allocation provided herein for such entities. The one-twelfth monthly allocation to each entity (except with respect to the Judicial Branch) shall be subject to the two and half percent (2.5%) withholding set forth in the section below during the first three quarters of FY2021.
- The Director of the Office of Management and Budget ("OMB") may authorize the encumbrance and disbursement of up to ninety-seven and a half percent (97.5%) of each appropriation intended for encumbrance and disbursement during the first three quarters of FY2021. The Director of OMB shall withhold the remaining two and a half percent (2.5%) of each appropriation until after the end of the third quarter of FY2021. Such withheld percentage of each appropriation shall only be encumbered and disbursed during the fourth quarter of FY2021 if (1) the first eight months of actual General Fund revenues reported to the Oversight Board reach the revenue forecast in the 2020 Fiscal Plan for that period and (2) the encumbrance and disbursement is approved first by the Oversight Board and then authorized by the Director of OMB. If actual General Fund revenues for the first eight months of the FY2021 fail to reach the revenue forecast for that period, the amount of the withheld percentage of each appropriation that may be encumbered and disbursed shall be reduced proportionally according to the negative budget variance between projected and actual General Fund revenues. Notwithstanding the foregoing, PayGo appropriations and agencies in the Department of Public Safety and in the Health groupings, as defined in the 2020 Fiscal Plan, shall not be subject to the two and half percent (2.5%) withholding requirement.
- No later than 45 days after the closing of each quarter of FY2021, the Secretary of Treasury shall revise the projected net revenues of the General Fund for FY2021 (the "Quarterly Revision") and notify the revision to the Director of the OMB, the Governor and the Oversight Board. The Quarterly Revision shall project future revenues based on actual General Fund revenues and include revisions to the assumptions used to generate the General Fund's net revenue projections.
- All appropriations authorized in any prior fiscal year, including appropriations without a specific fiscal year, are eliminated and no disbursement of public funds may be covered by such appropriations, except the following which the Oversight Board redeploys as current appropriations, subject to Oversight Board adjustment at any time: (1) appropriations authorized in the fiscal year to carry out permanent improvements that have been encumbered, accounted for and kept on the books; (2) appropriations in the certified budget for equipment with procurement cycles that extend beyond the end of the fiscal year, which are encumbered on or before June 30, 2021; (3) the portion of the appropriations authorized for fiscal year that have been encumbered on or before June 30 of such fiscal year, which shall be kept in the books for 60 days after the termination of that fiscal year and after those 60 days no amount shall be drawn against such portion for any reason; (4) the appropriation in the amount \$130 million for the emergency reserve included in the FY2020 certified budget and required by Section 5.2.8 in the 2020 Fiscal Plan (the "Emergency Reserve"); (5) the unobligated portion of the \$100 million Public Assistance Federal Fund Matching appropriation included in the FY2020 certified budget; (6) the appropriation in the amount of \$34 million for the UPR Scholarships Fund included in the FY2019 and FY2020 certified budgets, which is held under the custody of the Department of Treasury; (7) Unused appropriations for use in audit services held at the Department of Treasury; (8) FY2020 unused General Funds intended for Medicaid related expenditures; (9) Unused Title III funds; (10) Reported unused funds from

Department of Health's Mental Disability program until the end of the following fiscal year; and (11) unused Special Revenue Funds collected during prior fiscal years for Ports Authority, Puerto Rico Convention Center District Authority and Puerto Rico Tourism Company. In addition, this restriction on the use of appropriations of prior fiscal years shall not apply to: (i) programs financed in whole or in part with federal funds; or (ii) orders by the United States district court with jurisdiction over all matters under Title III of PROMESA.

- On or before July 31, 2020, the Treasury Secretary, Executive Director of the Fiscal Agency and Financial Advisory Authority ("AAFAF", by its Spanish acronym), and the Director of the OMB shall provide to the Oversight Board a certification indicating the amounts of unused FY2020 appropriations for items (1), (2), (3), (4), (5) (6), (7), (8), and (9) of the previous section.
- Each power of OMB, AAFAF or the Department of the Treasury, including the authorities granted under Act 230-1974, as amended, known as the "Puerto Rico Government Accounting Act" ("Act 230"), to authorize the reprogramming or extension of appropriations of prior fiscal years is hereby suspended.
- The appropriations approved in this budget may only be reprogrammed with the prior approval of the Oversight Board. For the avoidance of doubt, this prohibition includes any reprogramming of any amount, line item or expenditure provided in this budget, regardless of whether it is an intra-agency reprogramming. Reprogramming also known as reapportionments may be made into spend concepts and/or objects not explicitly listed in the FY2021 certified budget resolution as long as such requests are submitted to and approved by the Oversight Board.
- The Governor shall submit to the Oversight Board all reporting requirements set forth on Exhibit 129 of the 2020 Fiscal Plan according to the reporting cadence described therein. In addition, if the Oversight Board approves a reprogramming pursuant to the section above, the immediately subsequent report by the Governor must illustrate the specific implementation of such reprogramming, including the amount, the source of the reprogrammed amount identified by government entity and expenditure concept, the government entity that received such amount, and the expenditure concept to which it was applied.
- In addition, the Governor shall submit to the Oversight Board a comprehensive reporting package in a similar format to that required and provided in accordance with Section 203 of PROMESA for the following specified programs within different agencies: (1) ASSMCA's Rio Piedras Hospital; (2) PRDE's Special Education; (3) DOH's Adult Hospital; (4) DOH's Pediatric Hospital; (5) DOH's Hospital Institutes; (6) DOH's 330 Centers Payments; and (7) DCR's Juvenile Program. Program reporting must include and clearly detail budget to actuals on a concept level basis, any reprogramming of funds within the program, and any reprogramming of funds to/from other programs or agencies.
- The reports required pursuant to this section are in addition to the reports that the Governor must submit to the Oversight Board in accordance with Section 203 of PROMESA.
- In conjunction with the reports that the Governor must submit to the Oversight Board no later than 15 days after the last day of each quarter of FY2021 pursuant to Section 203 of PROMESA, the Treasury Secretary, Executive Director of AAFAF and the Director of the OMB shall each certify to the Oversight Board: (1) that no appropriation of any previous fiscal year (except for the appropriations covered by the exceptions in the sections above) have been used to cover any expense; and (2) the Director of the OMB shall certify to the Oversight Board that no amount of (i) the Emergency Reserve and (ii) the unallocated

capital expenditures under the custody of OMB has been obligated unless authorized in accordance with the section below.

- The Emergency Reserve, the unallocated capital expenditures, and the economic incentive fund under the custody accounts of OMB and the Department of Treasury, respectively, as detailed in the certified budget for FY2020 and FY2021 may not be used to cover any allocation or expense whatsoever without the approval of the Oversight Board. The economic incentive funds held under the custody of the Department of Treasury will be released on a quarterly basis after a formal reapportionment is submitted by the Department of Economic Development (DDEC), reviewed and approved by OMB, and submitted to the Oversight Board for review, and the Oversight Board provides its authorization to release such funding. Exceptions to the economic incentive fund release may apply upon meeting all of the specified criteria listed on the Milestones and Incentives Appendix.
- As a rule, necessary for the responsible disbursement of budgetary allocations for operating and other expenses, OMB shall withhold from any of the allocations to the agencies of the Executive Branch the amounts necessary to pay for the pay-go contribution, unemployment insurance, or taxes withheld from their employees, when OMB determines that such a withholding is necessary to ensure compliance with these obligations by the agencies concerned. Any such amounts withheld by OMB shall solely be reprogrammed to pay the corresponding outstanding obligations related to PayGo contributions, unemployment insurance, or taxes withheld from employees.
- Additional General Funds may be made available to agencies upon reaching certain, specified milestones and after the approval and authorization from the Oversight Board. For FY21, see the Milestones and Incentives Appendix for allowable milestones / incentives and corresponding agencies. Once the respective milestones are achieved, agencies must provide a formal notice and submit supporting data corroborating such achievement for the Oversight Board's review.
- OMB and the Department of the Treasury are authorized to establish the necessary mechanisms to ensure that when implementing the concept of mobility, pursuant to the provisions of Law 8-2017, as amended, known as the "Puerto Rico Human Resources Management and Transformation in the Government Act," the corresponding transfer of funds allocated to payroll and related costs of said employee are to be carried out simultaneously.
- The Secretary of Treasury, the Director of the OMB, and the Treasurer and Executive Director of each agency or public corporation covered by the 2020 Fiscal Plan shall be responsible for not spending or encumbering during FY2021 any amount that exceeds the appropriations authorized for FY2021. This prohibition applies to every appropriation set forth in a budget certified by the Oversight Board, including appropriations for payroll and related costs. The Executive Director of AAFAF and the Director of the OMB shall also certify to the Oversight Board by September 30, 2020 that no amount was spent or encumbered that exceeded the appropriations in the certified budget for FY2020.
- For the avoidance of doubt, any reference within the budget to AAFAF, the Department of Treasury, or OMB, or any of their respective officers, shall apply to any successor thereof.
- On or before July 31, 2020, the Governor shall provide to the Oversight Board budget projections of General Fund revenues and expenditures for each quarter of FY2021, which must be consistent with the corresponding budget certified by the Oversight Board (the "Quarterly Budget"). The Quarterly Budget shall be provided to the Oversight Board in Excel format and include detailed allocations by agency, public corporation, fund type and concept of spend. Together with the report that the Governor must provide under Section 203 of PROMESA not later than 15 days after the last day of each quarter, the Governor

shall provide a quarterly variance analysis that is consistent with modified accrual accounting.

- If during the fiscal year the government fails to comply with the liquidity and budgetary savings measures required by this 2020 Fiscal Plan, the Oversight Board may take all necessary corrective action, including the measures provided in PROMESA Sections 203 and 204.
- In order to ensure agencies remain compliant with the 2020 Fiscal Plan, the Oversight Board has enacted a policy that includes reviewing contracts of \$10 million or more. The objective of these reviews is, among other things, to determine the extent to which the contracts are in compliance with the applicable fiscal plan(s). The Oversight Board encourages the use of additional object level professional service fee categories in order to support more transparency of how professional fees are spent. The Oversight Board is authorized to require review of contracts less than \$10 million to ensure compliance with the applicable fiscal plan(s).

The above implementation and fiscal controls requirements are important to ensuring the Government can make meaningful progress towards achieving the goals of the 2020 Fiscal Plan.

Chapter 21. Plan of Adjustment

On February 28, 2020, the Oversight Board filed an amended Plan of Adjustment for the Commonwealth, ERS, and PBA that proposed a comprehensive settlement between the Commonwealth and its creditors. This represented a significant advance in the ongoing efforts of Puerto Rico to exit bankruptcy, regain access to the capital markets, and begin the process of achieving a true economic recovery. In total, the Plan of Adjustment sought to achieve a nearly 70% reduction in the Commonwealth's total liabilities, a reduction in annual debt service to sustainable and affordable levels, and a substantial and reliable restoration of pensions. This plan followed extensive negotiations between the Oversight Board, Government, and various stakeholder groups, and sought to return the Commonwealth to a sustainable fiscal position, provide meaningful recoveries to creditors, and allow for the continued operation of Government services.

In light of the COVID-19 pandemic, the Oversight Board announced on March 21, 2020 that it would be seeking a motion to adjourn court proceedings on the Plan of Adjustment until further notice. Such action was taken so as to allow for the Government and Oversight Board to prioritize the health and safety of the people of Puerto Rico during this challenging time, and to better understand the economic and fiscal impact of the pandemic. The Oversight Board will continue to work collaboratively with the Government to find reasonable and meaningful financial and policy solutions that ensure the safety and well-being of the Island, while also still preserving prudent and sound fiscal policy.

Despite the adjournment in court proceedings, the Oversight Board remains committed to facilitating Puerto Rico's emergence from bankruptcy, while also recognizing the new realities facing the Island. It is a fact that certain Plan of Adjustment provisions, if enacted, would impact the primary annual surplus/deficit of the Commonwealth. The 2020 Fiscal Plan therefore incorporates all such provisions (detailed below) on the terms published in the February 28, 2020 Plan of Adjustment (as adjusted for the delay in any confirmation timing):

- Reduction in monthly pension benefits. The Plan of Adjustment requires an 8.5% reduction in monthly payments to retirees earning over \$1,200 per month.²⁹⁰
- Freeze in the accrual of benefits for JRS/TRS participants. Together with the transition of JRS and TRS participants to defined contribution pension plans, the Plan of Adjustment requires a freeze in the accrual of benefits earned under the pre-existing defined benefit pension plans of each group. In connection with this freeze, the Commonwealth shall also take the necessary steps to enroll JRS and TRS members under the age of 45 in Social Security.
- Increase in employer healthcare contribution. Commonwealth employees who are AFSCME union members shall see an increase in healthcare contributions provided by the Commonwealth from \$125 to \$170 per employee per month.
- Elimination of PayGo contributions to System 2000 participants. In exchange for an upfront payment of ~\$1.5 billion related to the restoration of historical plan contributions, System 2000 participants shall no longer receive pension or other system-administered benefits from the Commonwealth.

For additional detail on all Plan of Adjustment provisions, please refer to the published Plan of Adjustment, available on the Oversight Board website, as the authoritative source for information.

²⁹⁰ For such participants, the 8.5% reduction shall apply to the full amount of monthly pension benefits; however, the measure shall not reduce any participant's monthly pension benefits to less than \$1,200 per month. Additionally, if this formula returns a larger cut than 25% of the difference between the unadjusted monthly pension benefit and \$1,000 per month (\$600 if receiving Social Security), then the lesser of the two reduction formulations shall apply.

PART VI. Conclusion

The 2020 Fiscal Plan is the result of three years of intensive work sessions, dialogue, stakeholder engagement, and experience working to establish the conditions for economic recovery and growth for the benefit of residents of Puerto Rico. Across these activities, the Oversight Board and the Government collaborated to create a deep and rich fact base to underpin their work and remained focused on creating an integrated approach to restoring fiscal sustainability and economic opportunity for future generations of Puerto Ricans. The starting point for this Fiscal Plan involved numerous structural inhibitors to growth, over \$120 billion in outstanding debt and unfunded pension obligations, and the devastating impact from a historically-destructive set of natural disasters.

Yet in the aftermath of hurricanes, earthquakes, and the COVID-19 pandemic, and given the depth and breadth of the economic and health crisis faced by the residents of the Island, as well as the federal support mechanisms being made available, Puerto Rico now has a unique opportunity to take control of its future destiny through implementation of broad-based structural economic reforms.

First priority must be implementation of the transformational structural reforms that will change the nature of Puerto Rico's economic development trajectory and provide the residents of the Island with a better and more prosperous future. Disaster recovery-related spending will provide economic buoyancy in the coming years. However, the failure to pass comprehensive private sector labor market reform that Puerto Rico requires means that timely and robust implementation of the remaining structural reforms, such as ease of doing business reforms, is even more important to achieve meaningful economic growth. Without sustained dedication to implementing the 2020 Fiscal Plan, and the ambition to pursue additional structural reforms in the future, the challenges that have held back the economy will not be addressed, and the Government will have lost its window to restore long-term opportunity to the people of Puerto Rico. Importantly, future opportunities available to the people of Puerto Rico will depend on the level of implementation of the structural reforms required by the 2020 Fiscal Plan, and additional growth-inducing structural incremental reforms that the Government may seek to implement. The 2020 Fiscal Plan lays out a series of practical and proven growth-oriented structural reforms and investments, which, when coupled with the federal reconstruction funds, can ensure that the painful economic contraction caused by the pandemic is turned around as quickly as possible.

Second, reorganizing the way government services are delivered, as well as improving their delivery and efficacy on the Island, is critical. The Government has successfully managed to operate within certified budgets over the past years. PROMESA and Title III provide a temporary stay on Puerto Rico's unsustainable debt service. Unlike many states and countries, Puerto Rico has not yet been forced to reduce its government spending in FY2020 despite the impact that COVID-19 is expected to have on revenues. Unfortunately, since the first Fiscal Plan certified in March 2017, the Government's implementation of efficiency measures, which change the way government is organized, the way it delivers services, and the manner in which it defines which services are prioritized, has been slow and incomplete. As a result, the 2020 Fiscal plan provides the Government an opportunity in FY2021 to invest every effort without budgetary pressures and enable the Government to focus squarely on governance and improving service delivery to the people and businesses of Puerto Rico. The Oversight Board stands ready to work in partnership with the Government to achieve this vital outcome.

Appendix

Chapter 22. Model presentation

Overview of entities covered by and excluded from the 22.1 2020 Fiscal Plan

The 2020 Fiscal Plan addresses the finances of central government agencies, component units, and other agencies. Agencies for which an independent Fiscal Plan is being developed have not been consolidated into the 2020 Fiscal Plan and are only represented to the extent they impact the Commonwealth (Exhibit 130, Exhibit 131, Exhibit 132). It is important to note that PRIDCO has been removed from the 2020 Fiscal Plan, which is a change relative to prior Fiscal Plans and therefore may make some numbers incomparable.

EXHIBIT 130: MAJOR ENTITIES INCLUDED IN AND EXCLUDED FROM THE 2020 FISCAL PLAN



¹ CDB _HTA_end_UPR_have separate and apart facial plans from the Central Government, HTA and UPR_record General Fund appropriations.
2 Major CUs include the fallowing FCUs: ASEX_ASEX_PRITA_Ports, PBA_ADEA_AAFAF, HFA_SEC_PRICEDA.
Note_Housing Finance Authority_resources from the Cap Funds (money transferred by HUD for financing projects and repayment of bonds, are not contemplated in the 2020 faces Plan.

EXHIBIT 131: LIST OF ENTITIES COVERED BY THE 2020 FISCAL PLAN

Agency Code	Agency	Agency Code	Agency
8	Office of the Comptroller	43	Puerto Rico National Guard
10	General Court of Justice	45	Department of Public Safety
11	Traffic Safety Commission	49	Department of Transportation and Public Works
14	Environmental Quality Board	50	Department of Natural and Environmental Resources
15	Office of the Governor	55	Department of Agriculture
16	Office of Management and Budget	60	Citizen's Advocate Office (Ombudsmart)
18	Planning Board	62	Cooperative Development Commission
21	Emergency Management and Disaster Admin Agency	65	Public Services Commission
22	Office of the Commissioner of Insurance	67	Department of Labor and Human Resources
23	Department of State	6B	Labor Relations Board
24	Department of the Treasury	69	Department of Consumer Affairs
25	Hacienda	70	State Insurance Fund Corporation (SIFC)
28	Commonwealth Election Commission	71	Department of Health
29	Federal Affairs Administration	75	Office of the Financial Institutions Commissioner
30	Office of Admin and Transformation of HR	78	Department of Housing
31	General Services Administration	79	Automobile Accident Compensation Admin (ACAA)
34	Investigation, Prosecution and Appeals Commission	81	Department of Education
35	Industrial Tax Exemption Office	82	Institute of Puerto Rican Culture
37	Civil Rights Commission	87	Department of Sports and Recreation
38	Department of Justice	89	Horse Racing Industry and Sport Administration
40	Puerto Rico Police	90	Medical Services Administration (ASEM)
42	Puerta Rico Firefighter Corps	95	Mental Health and Addiction Services Administration
		96	Women's Advocate Office
100	Legislative Assembly	165	Land Authority of Puerto Rico
105	Industrial Commission	167	Company for the integral Development of Cantera's Peninsul
106	Public Housing Administration	168	Ports Authority
109	School of Plastic Arts	177	Land Administration
119	Dept of Economic Development, and Commerce	180	Tourism Company
120	Veterans Advocate Office	184	Solid Waste Authority
121	9-1-1 Services Governing Board	186	Culebra Conservation and Development Authority
122	Department of the Family	187	Health Insurance Administration (ASES)
123	Families and Children Administration	188	PR and the Caribbean Cardiovascular Center Corp
124	Child Support Administration	189	Institute of Forensic Sciences
126	Vocational Rehabilitation Administration	191	Musical Arts and Stagecraft Corporation
127	Admin for Socioeconomic Develop of the Family	192	Fine Arts Center Corporation
133	Natural Resources Administration	193	Office of Government Ethics
137	Department of Correction and Rehabilitation	195	Economic Development Bank
138	Institutional Trust of the National Guard of Puerto Rico	196	Public Broadcasting Corporation
139	Parole Board	198	Farm Insurance Corporation
141	Telecommunication's Regulatory Board	200	Special Independent Prosecutor Panel
152	Elderly and Retired People Advocate Office	208	Contributions to Municipalities (CRIM)
153	Advocacy for Persons with Disabilities of the CW of PR	211	AFICA
155	State Historic Preservation Office	215	Conservatory of Music
161	Infrastructure Financing Authority	220	Correctional Health
162	Public Buildings Authority (PBA)	-	

231	Health Advocate Office	289	Energy Commission
235	Housing Financing Authority (HFA)	290	Energy Affairs Office
238	Port of the Americas Authority	293	Center for Research Education and Medical Services for
241	Administration for Integral Development of Childhood		Diabetes
258	Puerto Rico Trade and Export Company	294	Bosque Modelo de Puerto Rico
264	Martin Peña Canal ENLACE Project Corporation	295	Fiscal Agency and Financial Advisory Authority (AAFAF)
265	Roosevelt Roads Naval Station Redevelopment	303	Convention Center District Authority (PRCCDA)
268	Institute of Statistics	329	Socio-Economic Development Office
272	Office of the Inspector General	928	Government Employee Retirement System (ERS)
273	Permit Management Office	928	Judicial Retirement System (JRS)
276	Public-Private Partnership Authority	929	Teacher Retirement System (TRS)
			Additional (Electronic) Lottery
277	Agricultural Enterprises Development Admin (ADEA)		Maritime Shipping Authority
278	Puerto Rico Education Council		Special Communities Perpetual Trust
279	Public Service Appeals Commission		Traditional Lottery
281	Office of the Electoral Comptroller		Unemployment Insurance Fund
285	Puerto Rico Integrated Transport Authority (PRITA)		Corp for the Industries of Blind, Mentally Retarded, and Other
286	Ponce Port Authority		Disabled People of Puerto Rico
			Puerto Rico Municipal Finance Corporation

EXHIBIT 132: LIST OF ENTITIES EXCLUDED FROM THE 2020 FISCAL PLAN

Entities issuing standalone fiscal plan

- Development Bank for PR
- Aqueduct and Sewer Authority
- Municipal Revenues
 Collection Center (CRIM)
- PR Electric Power Authority
- PR Highways and Transportation Authority⁵
- Puerto Rico Industrial Development Company
- Public Corporation for the Supervision and Deposit Insurance of Puerto Rico Cooperatives
- University of Puerto Rico²

Entities excluded from fiscal plan

- Agency Fund (Special Deposit Fund)
- Commonwealth of Puerto Rico Regional Center Corporation
- Public Finance Corporation (PFC)
- Puerto Rico Government Investment Trust Fund
- Puerto Rico Municipal Finance Agency
- Puerto Rico Water Pollution Control Revolv. Fund
- Puerto Rico Industrial Development Company
- Safe Drinking Water Treatment Revolving Loan Fund
- The Children's Trust Fund
- Tourism Development Fund

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Chapter 23. Macroeconomic projections

23.1 Economic and demographic trends

EXHIBIT 133: MACROECONOMIC TRENDS

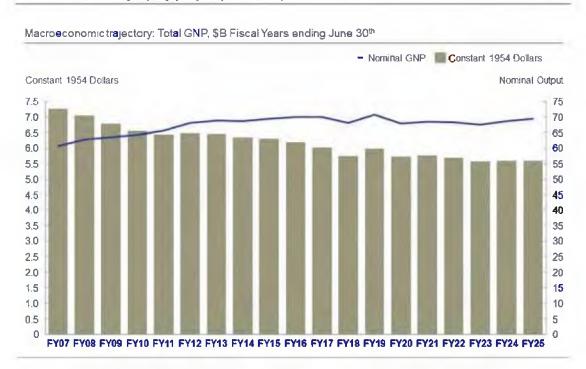


EXHIBIT 134: POPULATION TREND

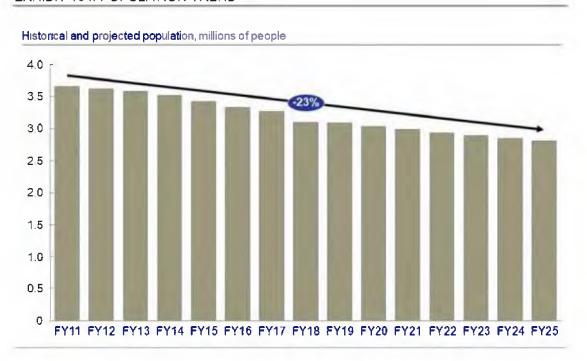
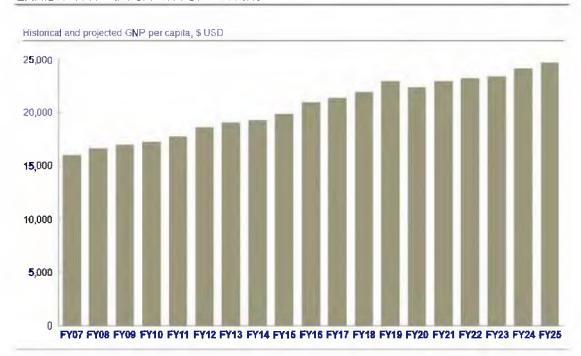


EXHIBIT 135: PER CAPITA GNP TREND



Chapter 24. Financial projections

24.1 Detailed financial projections

EXHIBIT 136: MACROECONOMIC OVERVIEW OF PUERTO RICO, FY2020-FY2025

Line (tem				FY2023	FY2024	FY2025	FY2020-25
Population =	3,033	2,984	2,936	2,891	2,851	2,813	
Population growth rate, -	(1.8%)	(1.6%)	(1.6%)	(1.5%)	(1.4%)	(1.3%)	
Real GNP growth, :	(4.0%)	0.5%	(1.5%)	(1.9%)	0.5%	(0.1%)	
Nominal GNP, SM	68,079	70,920	68,025	68,557	68,273	67,670	
Nominal GNP per capita, 1	22,428	22,975	23.252	23,404	24,133	24,720	
Nominal GNP per capita growth. 🦠	(2.4%)	2.4%	1.2%	0.7%	3.1%	2.4%	
Inflation, 🦙	(0.1%)	0.3%	1.1%	1.0%	1.1%	1.2%	
Disaster funding. 1	4,483	4,581	5,645	5,561	5,642	5,596	31,509
Revenues ¹ , 5%	21 571	21,133	20 174	19 324	19,552	19,724	121,477
Commonwealth revenues	14,716	14,348	14.703	14.328	14,496	14.604	87,195
Federal transfers	6,855	6,785	5,471	4,995	5,056	5,120	34,282
Expenditures ¹ , 33,1	(20,076)	(20,694)	(19,362)	(18,956)	(18,961)	(19 043)	(117,090)
Commonwealth-funded expenditures	(13,368)	(14,047)	(14,022)	(14 085)	(14.023)	(14.035)	(83,581)
Federally funded expenditures	(6.708)	(6 646)	(5 339)	(4 871)	(4,938)	(5.007)	(33,509)
Gap/surplus, ≝fil	1,495	440	812	368	591	681	4,387
Contractual debt service payments ² , \$M	(1,798)	(1,742)	(1 767)	(1,782)	(1,692)	(1,697)	(10,477)
Net gap / surplus, 👺	(303)	(1 302)	(955)	(1,414)	(1,101)	(1,016)	(6,090)
Surplus potentially not available ³ , \$M	77	85	170	168	173	172	844

Revenues and expenditures excluding gross up adjustments

Debt service based on prepation contractual debt obligations. Presented for illustrative purposes only & does not represent anticipated future payments on restructured debt, includes GO.

PBA. CDA. APPEA. PEC. ESS. PRECO. The 2020 Fiscal Paid does not assume any predetermined outcome of origining ligitation with respect to GO bonds.

3 These surprus amounts are generated by Commonwealth curporations and the Commonwealth's abidity to access such surplus amounts could be at risk without further legislative action.

EXHIBIT 137: REVENUE BREAKDOWN

Fiscal Year Ending June 30 EM	FY2020	PVSEI1	F+ 39.37	FY3(00)	F+2634	FY2925	1119-35
General Fund Revenues:							
Individual Income Taxes	2,014	1,813-	2,068	2,050	2,084	2,185	12,133
Corporate Income Taxes	2,247	1,744	1,765	1,751	1,780	1,796	11,083
Non-Resident Willhholdings	474	570	583	535	537	539	3,238
Alcoholic Beverages	257	266	264	263	262	262	1,574
Cigarettes-	98	96	95	94	93	93	568
Kotor Vehicles	338	341	339	336	342	346	2,043
Eccises on Off-Shore Shipment Rum	213	214	206	198	199	199	1,230
Other General Fund Revenue	340	342	341	338	343	347	2,059
Subtotal	5,980	5,386	5,661	6,564	5,640	5,688	33,920
SUT Collections (excl. 53.65% PSTBA, FAM & CINE)	1,776	1,917	1,892	1,850	1,869	1,874	11,177
Act 154 Collections	1,831	1,691	1,447	1,199	1,199	1,199	3,567
PREPA Loan Repayment		-	-	_		+	
General Fund Revenue (pre-measures)	9,587	8,994	9,00\$	8,613	8,709	8,761	53,664
Revenue Measures	232	233	396	450	457	462	2,233
General Fund Revenue (post-messures)*	9,819	9,227	9,399	9,063	9,166	9,224	55,896
Component Unit Revenue	1,361	1,192	1,305	1,300	1.318	1,331	7,807
Additional SUT (53.65% PSTBA, FAM & CNE)	126	127	127	126	128	129	762
Prind party ASES réceipts (rebates and municipal contributions)	270	309	415	425	435	445	2,299
Other Tax Revenues	2,330	2,433	2,408	2,379	2,398	2.416	14,364
Other Non-Tax Revenues		-	4.		-	1.4	
SRF expense for Commonwealth Agencies	809	1,060	1,049	1,037	1,051	1,059	6,066
Adj Revenue Post Measures (Excl Federal Transfers)	14,715	14,348	14,703	14,328	14,496	14.604	87,195
ederal Transfers to Central Government	4,240	4,240	4,273	4,306	4,346	4,368	25,793
ederal Transfers - Medicaid	2,456	2,367	1,037	527	548	566	7,519
ederal Transfers to Independent Component Units	159	159	161	162	164	166	971
levenues Post Measures	21,571	21,133	20,174	19,324	19,552	19 724	121,477
djustments for revenue gross up	727	716	705	699	704	708	4,260
evenue Post measures and postrevenue gross up	22,298	21,650	20.879	20.023	20,256	20.432	125,73

EXHIBIT 138: SUMMARY OF BASELINE EXPENDITURES AND MEASURES

Fiscal Year Ending, June 30, 51	F72705		Frank		P	FY STATE	FY2025-25
Expenses							
General Fund Expenditures							
Detect Payroll	(2,935)	(2,949)	(2,980)	(3,009)	(3,041)	(3,976)	(17.990)
Non-Personnel Operating Expenses	(1,697)	(1,711)	(1,723)	(1,745)	(1,773)	(1.794)	(10,443)
Municipal Expenses	(220)	(220)	(220)	(220)	(220)	(2:20)	(1.318)
Pension Expenses	(2,254)	(2, 332)	(2,314)	(2,311)	(2,309)	(2,301)	{43,852
Disaster Recovery Cost Match	(7B1)	(213)	(187)	(153)	(139)	(139)	(1,013)
Restructuring / Title 10 Costs	(217)	(162)	(109)	(89)	(42)		(619)
UPR Appropriation and Other GF Expenses	(1,099)	(1,224)	(1.162)	(1,121)	(1,056)	(1,068)	(6,716)
Fotal General Fund Expenses (excl. inter gov transfers)	(8,632)	(B #11)	(8,695)	(8,648)	(8)	(4,585)	[51,951]
Medicaid - commonwealth funded	(87)	(287)	(1,586)	(2.165)	(7,259)	(2.356)	(8,743
Secuti Programs - commonwealth funded	(15)	(15)	(15)	(15)	(9.5)	(15)	(91)
Total General Fund Expenses (excl. intergoy transferts)	(8,734)	[8, 113]	{10.396}	(19.028)	(10.854)	(10 958)	450,785
Federal Funds, SRF, and CU operating expenses:							
Direct Payroli	(1,329)	(1.321)	(1,335)	(1,347)	(1,382)	(1,378)	(8,972
Non-Personnel Operating Expenses	(1,924)	(1,827)	(1,799)	(1,618)	(1.843)	(1,889)	417,080
SRF expenses for Commonwealth Agencies	(735)	(857)	(906)	(894)	(906)	(914)	(5,212)
Medicaid - federally funded	(2,456)	(2.387)	(1,037)	(527)	(540)	(586)	(7,519)
Medicaid - SRP	(270)	(309)	(415)	(425)	(435)	(445)	(2,299)
Social Programs - federally funded	(2.730)	(2.734)	(2.751)	(2.788)	(2.819)	(2.850)	115.682
Total CW Funded Op. Exp	(18, 179)	(18 548)	[18 549)	(18,627)	(18 765)	(18,301)	[111,648]
Expense Veasures	(50)	(127)	1,132	1,584	1,748	1,905	5,202
Total CW Funded Op. Exp. Post Measures excl. Loss of Medicald Funding	(18,229)	(18 675)	(17,417)	(17,032)	(17,046)	(17,076)	(195,440)
Adjustment for expenditure gross up	(727)	(716)	(705)	(899)	(704)	(708)	(4,280
Net Operating Surplus/(Deficit)	3,341	2,458	2,757	2,291	2,535	2,648	16,00
Capex and Other Expenses:							
Maintenance Capex	(382)	(308)	(367)	(370)	(375)	(379)	(2,181)
Enterprise funds	(1,185)	(1.190)	(1.202)	(1.215)	(1.229)	(1,244)	(7.266
Disbursements of Tax Revenues to Entities Outside Plan	(512)	(399)	(366)	(330)	(334)	(338)	(2,278
Other Non-Recurring	234	(127)	(10)	(9)	(7)	(5)	80
Total Capex and Other Expenses	(1.647)	[2.018]	[9.945]	(1 923)	(1,943)	(1 967)	[11,644
Surplus Post Measures (excl. Debt Payments)	1,485	440	812	368	594	081	4,000
Contractual Debt Service Payments	(1,796)	(1,742)	(1,757)	{1,782}	(1.092)	(1,087)	(10,477
Surplus after Weasures and Debt Payments	(303)	[1 302]	(955)	(1,414)	(1.101)	(1,016)	(6,098
Surplus porentially not available, \$84	77	85	170	168	173	172	244

¹ Debt service based on prepetion contractual debt obligations. Presented for dustrative purposes only and does not represent anticipated future payments on restructured debt. 2 These surplus amounts are generated by Commonwealth corporations and the Commonwealth's ability to access such surplus amounts could be at risk without further legislative action.

Chapter 25. Fiscal measures

25.1 Agency efficiencies

Exhibit 139 details the payroll and non-payroll savings for each of the agency groupings. Agency groupings are as shown below in Exhibit 140.

EXHIBIT 139: MEASURES SUMMARY IMPACT FOR ALL AGENCY GROUPINGS 291

	FY2020	FY2021	FY2022	FY2023	FY2024	FY2021
Education	336.854	330.682	433,237	458,275	495.397	524.656
Courts and Legislature	84.540	75.614	90,906	97.225	98.325	99.51
Health	104,341	90.611	133,493	144.002	145.632	147,392
PublicSalety	141.371	141.078	162,334	178.920	180,945	183,133
Corrections	96.348	54.637	101.627	105.942	107.141	108.43
OCFO - Treasury	26,965	81,606	92,916	95,608	96,690	97.85
Public Works	37.260	38.671	65,951	68.071	68.842	69.67
State Insurance Fund Corporation	61,700	59.433	78,511	81,291	82,212	93,20
Economic Development	26,770	58.347	55,459	56.638	57.279	57.97
Executive Office	16 973	9.790	19,602	21,440	21.683	21,94
Independent Agencies	25.085	6.348	26,136	27,706	28.019	28.35
Environmental	15.034	10.535	18,674	19.642	19.864	20.10
Families & Children	21,108	20.652	49.821	55.642	56,272	56.952
Housing	26,798	18,272	23,404	25,358	25.646	25,95
Automobile Accident Compensation Administration	16.051	13,188	19,246	19,97B	20,204	20,44
Labor	13.473	11,871	18,221	19,309	19.527	19,76
FOMB	10,971	17,375	17,447	17.502	17,700	17.914
Agriculture	26,662	24.992	29,860	30.345	30,689	31,086
Justice	14,619	13.898	18,393	21.320	21.561	21.82
Culture	5.407	4.665	6.833	7.088	7.168	7.25
Ciosures	3,377	10,393	15,748	16,075	16,257	16,45
Finance Commission	3,513	2.963	4,197	4.349	4.398	4.45
Retirement Services	26,656	2,900	3,011	3.154	3.189	3,226
Land	2,894	1.740	4.021	4,159	4.205	4,256
State	11,203	2.025	3,345	3.441	3,480	3,522
Hillies Commission	3,239	1,531	3,115	3,281	3,318	3,358
Transparency & Control Entities	995	564	1.009	1,018	1.030	1.042
Ombudsman	1.692	1,565	2,338	2,462	2,490	2.520
Universities	1.651	1,355	1,955	2,121	2.146	2.17
institute of Statistics	483	375	537	550	557	563
Custody Acct.	110,841	48,230	66.753	67.498	68,262	69,08
Public Service Commission	110,071	49,204	00,700	V1,700	-	00,00
Total ruft Fate savings from agency efficiency measures	1.274 875	1,156,096	1,569,100	1,659,409	1,710,130	1,754,07

¹ Excluding investments and other funding increases

²⁹¹ Excluding investments and other funding increases.

25.2 Agency groupings and consolidation progress

Agriculture	Agroutural Enterprises Development Administration Department of Agrouliure	3 Farm (resusance Corporation
Courts and Legislature	Seneral Court of Justice (Court)	2 Legislative Assembly (LA)
Curture	1 Fine Arts Center Corporation	Mesical Arts and Magecraft Corporation
LUMBE	2 Institute of Puerto Rican Culture	
	Authority for the Redevelopment of Roosevert Roads Naval Station.	Permt Slaragement Office
Economic	Department of Economic Development and Commerce	7, Planning Board
Development	3 Energy Affairs Office	8s Puerto Rico Trade and Export Company
D. C.	I=sustrial Development Company	9. Regional Center Corporation of Commonwealth of PR.
	5 Industrial Tax Exemption Office	10 Tourism Company
Environmental	Department of Disturblished Conformental Resources	3: Natural Resources Administration
Elitti Olivectori	2 Environmental Quality/Sould	4 Solid Waste Authority
	1 Federal Affairs Administration	Office of Souce conomic Development
Executive Office	2 Infrastructure Tancing Authority	2 Public Buildings Authority
LACOUGHE OFFICE	3 Office of the Commissioner of Municipal Affairs	Public-Private Partnership Authority
	4 Office of the Governor	State Historical Preservation Office
Finance	1 Office of the Commissioner of Insurance	2 Office of the Inancial Institutions Commissioner
Comnission		
	Center for nessarch, Education and Medical Services for Diabetes	
Health	2 Department of Health	5- Medical health and Addiction Services Administration
	3 Health Insurance Administration	Puerto Rico and Caribbean Cardiovascular Center Corporation
NT.PO.	2 University of Puerto Rico Comprehensive Cancer Center*	2: Parole Board
Justice	1 Department of Justice	
ndedon.	Department of Labor and Human Resources	4 Public Service Appeals Commission
Labor	2 Investigation, Prosecution and Appeals Commission	Vocational Rehabilitation Administration*
	3 Labor Relations Board	
Land	1 Land Administration	2 Land Authority
- 1	Agnoultural Development Innovation Fund	
	Advocaby by Persons with Dissibilities of the Commonwealth of Puerto Rico	A Veterans Advocate Office
Ombudsman	2. Elderly and Refred People Advoca - Office	
	3 Health Advocate Office	
Public Works	1 Department of Transportation and Fublic Works	3 Forts Authority
danc rones	2 Integrated Transport Authority	4 Traffic Safety Commission
	Administration for Integral Development of Childhood	4 Department of the Family
Families	2 Administration for Socioeconomic Development of the Family	5 Families and Children Administration
	3 Chaid Support Administration	
Housing ²	1 Department of Housing	h Mic Housing Administration
nousing-	2 Housing Financing Authority	
State	1 Department of Size	2 Puerto Rico Education Courcil
Transparency &	1 Office of Government Ethics	2 Office of the Comptroller
Control Entities		
	Puerto Rico Police Department (PRPD)	5 9-1-1 Services Governing Board
Department of	2 Firefighters Corps	6 Institute of Forensio Sciences
Public Safety	3 Emergency Medical Services Corps	7 Special Investigation Unit
	Emergency Management and Disaster Azministration Agency	8 Department of Pu Safety
	Department of the Treasury	Office of Management and Bodget
Treasury / OCFO	2 Habienda	General Services Administration
oci q	3 Puerto Rico Office of Human Resources Management and Transformation	Fiscal Agency and Firer.ca' Advisory Authority
Universities	1 Conservatory of Music	2 School of Flagic Arts
	1 Puerto Rico Energy Soard	♣ Independent Bureau of Consumer Protection
Utilities	2 Public Services Commission	5 Telepomonumos una Begulatory Por el
Commission	3 Public Service Regulatory Soard	
	1 Model Forest of Puerto Rico	3 Cinetia Coscervatos and Development Authority
Closures	2 Eppnomic Development Bank	Chicken and the latest the
	4. Civilian's Advocate Office (Ombudsman)	12 Of fipe of the Electoral Comptroller
	2 Civil Rights Commission	13 Office of the Inspector General
	Commonwealth Election Commission	14 Port of Ponce Authority
	Company for the integral Development of Cantera's Peninsula.	15 Fort of the Americas
	5 Conventor Center District Authority	16 Public Broadcasting Corporation
Independent	Cooperative Development Commission	17 Puerro Rico Innovation and Technology Services
Agencies	Department of Consumer Affaire	18 Puerto Rico Natoriai Guard
	B Department of Sports and Recognition	19 Special Independent Prosecutor Panel
	Gaming Commission	20 Teacher's Retirement System
		20 Teacher's Nettrement System 21 Institute of Statistics
	10 Industrial Commission	24 H.SUIGE 0: 3815802
	11 Martin Peña Canal ENIACE Project Corporation	Charaltenuman E. and Companyline
Other	Automobile Accident Compensation Authority	3 State Insurance Fund Corporation
	2. Financial Oversight and Management Board	

EXHIBIT 141: AGENCY CONSOLIDATION PROGRESS DETAILS

Grouping	Agencies	Con	solidation U\$		Remarks and key FY21 priorities (indicated by agency)
State	Department of State, Puerto Rico Education Council	•	Completed	Law 212-2018	Consolidation of shared services completed within 90 days; savings higher than USD 40 thousand realized in rental contract cancellation One single Finance reporting and HR systel Staffing remains constrained
Utilities Commission	PR Energy Board (PREB), Public Service Commission (PSC), Independent Bureau of Consumer Protection. Telecommunications Regulatory Board	•	Completed	Law 211-2018	Consolidation of shared services completes under Public Services Commission (JRSP) All administrative (e.g., HR, Legal, Finance) supervision consolidated under one director If yet to consolidate under central office location and implement platform integration.
Environ- mental	Department of Natural and Environmental Resources, Environmental Quality Board, Natural Resources Administration, Solid Waste Authority	•	Completed	Law 171-2018	Office localions consolidated in the same building Shared services and back-office systems consolidated across agencies
Agriculture	Agricultural Enterprises Development Administration (ADEA). Department of Agriculture (DA). Farm Insurance Corporation (CSA)	•	Completed	MOU signed (expiration December 31, 2020)	Consolidation of administrative areas (HR, Legal, Finance, IT) for ADEA and DA is complete with shared back-office (with back office personnel efficiencies) CSA continues to maintain operational independence (legal limitations on being an insurance company) but is in the process to merge IT systems with ADEA
Department	Puerto Rico Police Bureau (PRPB), Firefighters Corps, Emergency Medical Services Corps, Emergency Management and Disaster Administration Agency, 9-1-1 services Governing Board, Institute of Forensic Sciences, Special Investigations Unit	***	Defayed	Law 20-2017	 Processes unified for all functions (except HR) across bureaus; currently consolidating shared services Direct reporting and central office establish across most functional departments; currently staffing vacancies FY21 priority to recruit civilian staff for administrative roles and implement KRONC across all bureaus
Economic Development	Authorty of the Redevelopment of the Roosevelt Roads Naval Station (RR), Department of Economic Development and Commerce. Energy Affairs Office, Industrial Development Company (PRIDCO), Industrial Tax Exemption Office, PermitManagement Office, Planning Board, PR Trade and Export Company, Regional Center Corporation of Commonwealth of PR (CRELA), PR Tourism Company (PRTC)	ø	Delayed	Law 141-2018 establishes all agencies to be reorganized into DDEC except ascribed agencies (RR, PRIDCO and Planning Board)	older hemmig blankford acceptagement
Finance Commission	Office of the Commissioner of Insurance (OIC), Office of the Financial Institutions	•	No progress	Legislation repealed; • MOU certified	consolidation is yet incomplete
Health	Center for Research Education and Medical Services for Diabetes, Comprehensive Cancer Center, Department of Health, Health insurance Administration, Medical Services Administration, Mental Health and Addiction Services Administration, Puerto Rico and Carlibbean Cardiovas cular Center Corporation	•	No progress	Legislation pending For ASES/DOH Consolidation	Plan presented to Oversight Board for consolidation of shared services No back-office consolidations achieved between agencies in the grouping
Labor	Department of Labor and Human Resources, Investigation, Prosecution and Appeals Commission, Labor Relations Board, Public Service Appeals Commission, Vocational Rehabilitation Administration	•	No progress	MOD not signed	No progress reported on consolidation of shared services
Family	Administration for Integral Development of Childhood, Administration for Socioeconomic Development of the Family, Child Support Administration, Department of Family, Families and Children Administration	•	Defayed	Legislation proposed • but not presented •	MOU pending for physical space consolidation Backoffice consolidation has been achieved partially between some sub-groups of agencies bul inconsistently across different functions (e.g., HR. Procurement)
Treasury OCFO	Department of the Treasury, Puerto Rico Office of Human Resources Management and Transformation (OATRH), Office of Management and Budget (OMB) General Services Administration (GSA), Fisical Agency and Financial Advisory Authority (AAFAF)	•	Na progress	Legislation not passed/ MOU's pending	shared services

Executive Office	Federal Affairs Administration, Infrastructure Financing Authority, Office of the Commissioner of Municipal Affairs. Office of the Governor, Office of Socioeconomic Development, Public Buildings Authority, Public-Private Partnership Authority, State Histonical Preservation Office	No pro	gress	No legal provision	Government has indicated no willingness to merge agencies
Cultiple	Fine Arts Center Corporation, Institute of Puerto Rican Culture, Musical Arts and Stagecraft Corporation	No pro	gress	MOU signed (expiration June 30 2023)	 Only consulting services shared as of now No progress (or future plans) reported on unification of functions or offices
Public Works	Department of Transportation and Public Works (OTPW), Integrated Transport Authority (ITA), Ports Authority, Traffic Safety Commission (TSC)	No pra	gress	Legislation repealed	No progress or future implementation plans reported
Housing	Qepartment of Housing, Housing Financing Authority, Public Housing Administration	No prù	gress	No law or MOU • signed	All agencies currently operating independently, no progress or future implementation plans reported
Universities	Conservatory of Music, School of Plasfic Arts	No pro	gress	Legislation proposed i but not presented	Government letter to Oversight Board claimed lack of Inter-agency cooperation
Justica	Qepartment of Justice. Parote Board	No pro	gress	No detail provided on legal provision or MOU	No progress or future implementation plans reported; Parale board still under DCR
Land	Land Administration, Land Authority	No pro	gress	No law or MOU signed	 Both agencies currently operating independently, no progress or future implementation plans reported
Ombudsmen	Advocacy for Persons with Disability. Elderly and Retired People Advocate Office, Health Advocate Office, Veterans Advocate Office, Women Advocate Office	No pro	gress	Legislation repealed; • MOU not signed	No progress or future implementation plans reported

25.3 Key reform implementation milestones required by prior Fiscal Plans

The 2019 Fiscal Plan and prior Fiscal Plans required the Government to achieve a set of important implementation milestones deemed necessary in order to realize savings targets for agency efficiency, Medicaid reform, tax compliance and fee enhancement, and pension reform measures. As previously discussed in this 2020 Fiscal Plan, the Government has not made meaningful progress against the implementation milestones nor the savings targets in a manner enabling of a rightsized Government while also improving quality and effectiveness of the services provided to Puerto Rican residents.

The following exhibits provide the implementation milestones required by prior Fiscal Plans, and reflect the actions and deadlines stated in the 2019 Fiscal Plan. Looking ahead, the Government must couple the achievement of budget efficiencies with true operational transformations (i.e., process re-engineering) to ensure budgetary changes are sustainable within rightsized operational capabilities. In the prior chapters of this 2020 Fiscal Plan, the Oversight Board has outlined new required implementation actions for the Government agencies to prioritize, primarily in FY2021.

EXHIBIT 142: CROSS-CUTTING PERSONNEL AND NON-PERSONNEL MEASURE IMPLEMENTATION MILESTONES

Areas of locus	Action item	✓ = Complete Deadline
	 Pass legislation to freeze payroll for public employees through at least FY23 	March 31, 2019
Payroli freeze	Institute payroll freeze	June 30, 2019
	Review policy of payroll freeze	June 30, 2023
Eliminate Christmas bonuses	Implement Christmas bonus phase out	December 1, 2018
	Launch RFP for uniform healthcare	July 1, 2018
	• Implement new contract	January 1, 2019
	Launch new RFP process	January 1, 2022
	New provider coverage operational	July 1, 2022
	 Develop energy and water efficiency savings plan modeled after the U.S. Federal Energy Management Program 	July 1. 2018
	• Implement efficiency plan and achieve 40% of total run-rate savings in FY2020	July 1, 2019
	■ Achieve 100% of run-rate savings, which will represent 15% savings off of FY2018 expenditures	January 1, 2023
	 Conduct analysis of all professional services expenditures and those categorized as 'other' to identify potential savings opportunities 	July 1, 2019
	■ Implement reduction of professional services and 'low visibility' expenditures to achieve 10+%	July 1. 2019
	Categorize all professional services contracts moving forward to ensure reduction of 'other' category	October 1, 2019

EXHIBIT 143: DEPARTMENT OF EDUCATION GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Required implementation action	→ = Comp Deadine	
	Outline clear pathway to achieving 33% progress to desired student-leacher ratio by end of FY19 (school closures and any other measures)	August 1, 2018	
	Publish number of leachers reduced through school closures	September 1, 2018	
	Outline further measures required to reduce teacher numbers	September 10, 2018	
	Complete measures to achieve target of 14:1	End of SY22	
	Close 255 total schools	End of SY18	
	Develop transportation plan for relocated students	July 1, 2018	
	 Ensure cancellation of auxiliary service contracts (i.e. food, maintenance) to capture savings and release non-teacher headcount reductions 	August 1, 2018	
	Sell or reappropriate empty buildings	September 1, 2018	
	 Publish report on cost savings achieved through school closures (non-teacher personnel and auxiliary services) 	November 1, 2018	
	Established regional superintendencies	August 1, 2018	
	Pass legislation to formalize new structure	October 1, 2018	
	Merit-based Regional Leadership selection system in place	October 1, 2018	
	Regional superintendancies established and staffed	October 30, 2018	
	Publish plans for rightsizing the state educational agency (SEA)	October 30, 2018	
	• implement rightsizing plans	December 31, 2018	
	Review rightsizing plans	Ongoing	
	Develop new centralized operating model for procurement	September 1, 2018	
	Identify major contract targets for savings	September 1, 2018	
	Release RFP for major services	October 1, 2018	
-	Capture savings	November 1, 2018	
	Review procurement strategy	January 1, 2021	

EXHIBIT 144: DEPARTMENT OF HEALTH GROUPING KEY IMPLEMENTATION MILESTONES

possion total	Reguned replantablation, action	✓ a Complet Deadline
	Pass legislation of merging entities	January 1, 2019
Consolidate	Complete system integration between agencies	June 30, 2019
agencies	Monitor merger progress	Orgoing
	Complete capacity enalysis	September 1, 2018
	Create new organizational plans	November 1, 2018
Rightsizing	Create training program for employee transitions	January 1, 2018
personnel	Commonce wave two of rightsizing	July 1, 2019
	Assess rightstang achievements and review strategy for date.	July 1, 2021
	Complete rightsizing	June 30, 2023
	tulentity branch memoreness and determine offices for closure, leaving contralized locations.	November 1, 2018
Consolidate	Creste plan for office dissures	December 1, 2018
egional	Imploment closures	February 1, 2019
Medicaid offices	Membr post-cosure samings	Ongoing
	 Conduct thorough invaniory of current procurement processes, suppliers, and process owners 	October 1, 2018
	Begin RFP propess for vendors	November 1, 2018
improve supply	Select vendor	December 1, 2018
chain	Implement changes	February 1, 2019
management	Review cutrent provider and issue new REP	Jenuary 1, 7021
	Launch new growder contract	July 1, 2021
	Monitor sawings	Drigoring
	 identify apportunities for process standardization (procurement outsourcing of lasks, technology integration) 	October 1, 2018
	 Build plan including creating workflows and standard policies based on best practices by practice area. 	December 1, 2016
Transform	Redesign evaluation chileria based on best practices and outcomes	December 1, 2018
hospital management	Review current operations and build now map strategy	January 1, 2022
managament	• implement new system	June 30, 2022
	Monitor savings	Ongoring
	Launch REP for external support	August 1, 2018
	Sign contract with provider	September 1, 2018
Redesign ASEM	Implianent revenue cycle neurolgement	Dolober 1, 2018
management	Review chicont provides performance and requirement	Jensary 1, 2021
guintiit	Launch new proyider	June 30, 2021
	Monitor savings and manteux provider relationship	Ongorng

EXHIBIT 145: DEPARTMENT OF PUBLIC SAFETY GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Required implementation action	Deadline = Complete
Improve processes	Publish plans for improving processes (including automation etc.)	September 1, 2018
	Implement plans for improving processes	December 1, 2018
	Evaluate process improvement strategy	June 30, 2020
	Identify and implement additional process improvement opportunities	Ongoing
Civilianization of non-core	 Publish plan of swom officer positions that can be replaced with civilian-like duties for staff reduction/replacement with civilian counterparts 	September 1, 2018
lasks	Evaluate civilanization and outsourcing strategy	June 30, 2020
Consolidation	Publish plan to consolidate stations, units and divisions	August 31, 2018
timination of tations, units addivisions	* Implementalian	March 1, 2019
	 Identify additional consolidation and elimination opportunities 	Ongoing
	Publish plan to reduce overtime	August 31, 2018
Overtime efficiencies	• Implement plan	December 31, 2018
	Review and evaluate overtime reduction plan	January 1, 2020
	Identify officers eligible for a raise of \$1,500 of annual salary	by FY 2019
	 Institute \$1,500 raise across all sworn officer positions within PRPD 	by FY 2019
Salary and benefits increases	 Institute additional raise for all swom officer to close PPP-adjusted U.S. mainland salary gap of -\$11,000 and provide additional \$100 per year per officer for improved life and disability insurance 	by FY 2021
	 Institute \$500 raise for all firefighters in the Puerto Rico Firefighter Corps 	By FY2020
	Monitor retention rates and evaluate need for further raise.	Ongoing
	Identify addressable non-personnel spend	September 1, 2018
Non-personnel	Reduce non-personnal spand by 1/3 of the total run-rate savings	by FY 2019
reduction	Review procurement spend reduction strategy	January 1, 2021
	Ressess opportunities for procurement efficiencies	Jenuary 1, 2023

EXHIBIT 146: DEPARTMENT OF CORRECTIONS AND REHABILITATION GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Required implementation action	✓ Complete Deadline
Consolidate	Publish plans to consolidate prisons	August 1, 2018
	Close 5 prisons	September 1, 2018 💙
	Implement plan to reuse or sale buildings	October 1, 2018
facilities	Close further 2 prisons	February 1, 2018
	Implement plan to reuse or set additional buildings	March 1, 2018
	Evaluate opportunities for additional closures	Ongoing
Rightsizing personnel	Publish plans to reduce headcount across DCR system	August 1, 2018
	Commence stage one of rightsizing	September 1, 2018
	Implement further agency efficiency measures	July 1, 2019
	Complete agency efficiency measures	June 30, 2021
	Publish plans for consolidation of procurement spend	September 1, 2018
Optimize	Initiate RFPs as needed for vendors to improve quality and cost of services.	September 15, 2018
tnemeruporq	Select vendors and sign contract to address min. 20% of procurement costs.	October 1, 2018
spend	Review procurement strategy	January 1, 2021
	Reassess apportunities for procurement efficiencies	January 1, 2023
Redesign correctional	Launch RFP for correctional health services	October 1, 2016
	Appoint vendor for services	December 1, 2018
health program	Implement new contract	Јапиагу 1, 2019 🤏
h A II.	 Confirm strategy for any additional savings needed beyond those in contract 	July 1, 2020

EXHIBIT 147: DEPARTMENT OF ECONOMIC DEVELOPMENT GROUPING KEY IMPLEMENTATION MILESTONES

Areas of focus	Required implementation action	✓ = Complete Deadline
Consolid- ate agencies	Pass legislation to merge entities	September 1, 💙
	Finalize system mergers between entities	June 30, 2019
	Complete all process and organizational changes	June 30, 2020
Right-size the number of employees	Complete capacity analysis for new merged entity	September 1, 2018
	 Publish plan for new organizational structure with plans for reduction in personnel – both front line and back office 	November 1, 2018
	Full implementation of agency efficiency plan	June 30, 2019
Optimize non- personnel spend	 Conduct scan of non-personnel spend and prioritize by major opportunities for savings 	September 1, 2018
	Define plan to execute on priority opportunities	November 1, 2018
	Reduce non-personnel spend by 30%	Ongoing

EXHIBIT 148: OFFICE OF THE CHIEF FINANCIAL OFFICER GROUPING KEY IMPLEMENTATION MILESTONES

reas of focus	Required implementation action	✓ = Completex Deadline
,	Pass legislation to merge entities	September 1, 2018
	Finalize system mergers between entities	June 30, 2019
	Complete all process and organizational changes	June 30, 2020
	Identify major contract opportunities and estimate value	October 31, 2018
	Develop strategy for footprint consolidation and digitalization	November 1, 2018
	Start re-negotiations of target contracts	December 1, 2018
	Identify retail banking partners	December 31, 2018
	Roll out trial of consolidating services in bank real estate and start site closures	March 31, 2019
	Finalize plan for footprint reduction informed by pilot	June 30, 2019
	 Review of procurement savings achieved and develop strategy for FY20 	June 30, 2019
	Launch consolidation in all municipalities and finalize closures	June 30, 2021
	Assess impact of digitalization and footprint consolidation and identify future opportunities	Ongaing
	Complete capacity analysis for new merged entity	Seplember 1, 2018
	Conduct scan of non-personnel spend and prioritize by major opportunities for savings	September 1, 2018
	Define plan to execute on priority opportunities	November 1, 2018
	Publish plan for new organizational structure with plans for reduction in personnel	November 1, 2018
	Review personnel rightsizing in light of above initiatives.	June 30, 2019
	Complete personnel rightsizing to end state	June 30, 2021
	Reduce non-personnel spend by 30%	Ongoing

EXHIBIT 149: OTHER AGENCY GROUPINGS KEY IMPLEMENTATION MILESTONES

		= Complete
Areas of focus	Action item	Deadline
	Pass legislation of merging entities	September 1, 2018
	Finalize system mergers between entities	June 30, 2019
	Complete all process and organizational changes	June 30, 2020
	Complete capacity analysis for new state entity	September 1, 2018
J	Publish plan for new organizational structure with plans for reduction in personnel	November 1, 2018
	Full implementation of agency efficiency plan	June 30, 2019
	Conduct scan of non-personnel spend and prioritize by major opportunities for savings	September 1. 2018
	Define plan to execute on priority opportunities	November 1, 2018
	Reduce non-personnel spend by Fiscal Plan targets	Ongoing

EXHIBIT 150: TAX COMPLIANCE AND FEES ENHANCEMENT KEY IMPLEMENTATION MILESTONES

Areas of locus	Required implementation action	= Comp Deadline	leted
Improve Compliance in Major Taxes (SUT, CIT, PIT)	 Finalize integrated plan for compliance improvement across major tax types, including expected value from each 	October 31, 2018	
	Develop resource and milestone plan to support activities identified in the compliance improvement plan	November 30, 201	18
	 Launch acquisition activities (personnél, IT, external support) as needed to drive progress against key Initiatives 	November 1, 2018	3
	Continue monitoring performance of internet sales tax.	Ongoing	•
Right-Rate Taxes and Fees	Initiate new gaming lax license collections and report on revenue yield	April 30, 2018	•
	Initiate new licenses and fees collections and report on revenue yield	June 30, 2018	*
	Apply local laxes to Airbnb rentals and report on revenue yield	March 31, 2019	•
	Continue collecting taxes on medical marijuana and report on revenue yield	Ongoing	•
	Continue collecting increased tobacco taxes and report on revenue yield	Ongoing	
	Evaluate performance of added tax types; measure collections and compliance	June 1, 2022	

EXHIBIT 151: PENSION REFORM KEY IMPLEMENTATION MILESTONES

Areas of locus	Action item	Deadline = Completed
Shift to Defined Contribution Accounts	Transition hybrid accounts to segregated DC accounts Implement JRS / TRS Ireeze and transition to segregated DC accounts	July 1, 2019 January 1, 2020
Reduction in Pension Benefits	Implement 10% average pension reduction	July 1, 2020
Social Security	Pass regislation for enrollment of all police, including new hires, in Social Security Enroll all police, including all new hires, in Social Security	June 30: 2019 🗸
	 Pass legislation for enrollment of teachers and judges under 45, as well as all new hires, in Social Security 	September 30, 2019
	Enroll teachers and judges under 45, as well as all new hires, in Social Security	January 1, 2020

Areas of locus	Action item	= Completed Deadline
	Release RFP, publish data-book, hold conferences, and develop proposals for FY2019 MCO contract	December 31, 2017 •
	Receive proposals, negotiate rales, award and signed FY2019 MCO contract	June 30, 2018
	Receive adjudication of FY2019 MCO contract from CMS	October 31, 2018
	Implement FY2019 MCO contract	November 1, 2018
	Build out analytics and quality assessment tools	December 31, 2018
	Conduct first quarterly audit and review of FY2019 MCO contract	March 1, 2019
Overall New	Publish first HEDIS report	March 1, 2019
Healthcare Model	Complete negotiation of rates and finalize amendments to the MCO contract for FY2020	August 15, 2019
	Conduct second quarterly audit and review of FY2019 MCO contract	May 1, 2019
	Receive approval of negotiated premiums and amendments to MCO contract for FY2020	Oct 15, 2019
	Achieve \$222 in savings from new island-wide healthcare model	July 1, 2020
	Achieve \$347 in savings from new island-wide healthcare model	July 1, 2021
	Achieve \$478 in savings from new island-wide healthcare model	July 1, 2022
	 Achieve \$615 in savings from new island-wide healthcare model 	July 1, 2023
Other Healthcare Cost Savings Initiatives	 Establish a functional Medicaid Management Information System (MMIS) to track utilization, claims, and provide the data inputs for advanced analytics assessments to identify inappropriate spending, while also leveraging the national Public Assistance Reporting Information System (PARIS) 	January 1, 2018
	 Pass legislation to establish a Medicaid Fraud Control Unit (MFCU) under PR Department of Justice to identify and prosecute fraudulent charges 	June 30, 2018
	Receive certification of MFCU from HHS Secretary	September 30, 2018
	Fully operationalize MFCU	December 31, 2018